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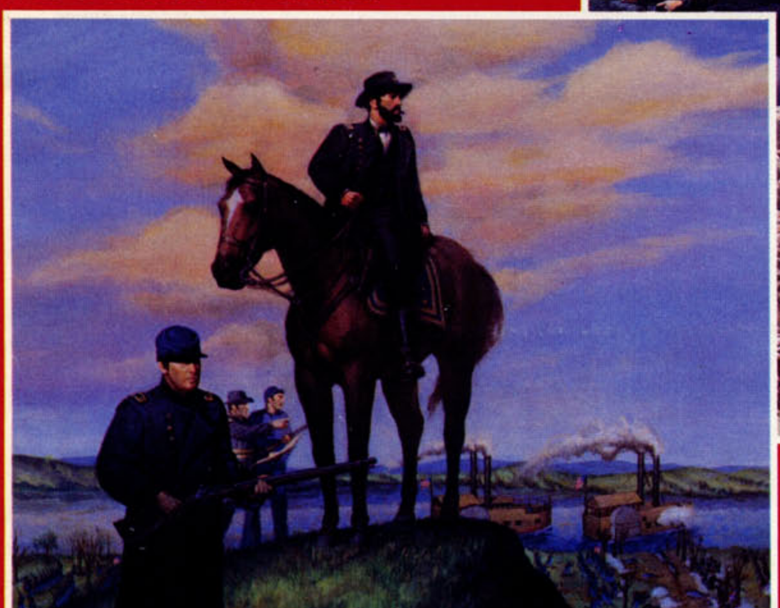
January 1988
Number 43
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Wargaming: Then and Now



Microprose's Airborne Ranger

SSI's Battle of Shiloh



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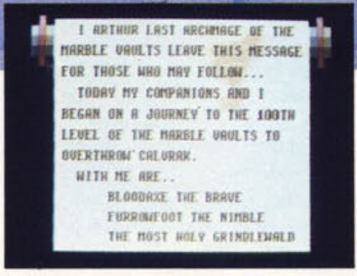
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TAKING A PEEK

Accolade
20813 Stevens Creek Blvd.
Cupertino, CA 95014

APOLLO 18: "One quick flip of the joystick for man, another challenging action game for Accolade." Eight scenarios await prospective mission control specialists and astronauts from Launch, En Route, Lunar Landing, Moonwalk/ Lunar Blastoff, Docking Maneuver, Return Route (with Spacewalk), Re-Entry, and Splashdown/Recovery. Each sequence requires a different style of timing and skill and they must be successfully completed in sequence in order to win the game. C-64 ($29.95). Circle Reader Service #1.

PROJECT: SPACE STATION: With NASA finally taking the gamble of authorizing expenditures for the space station project, this re-release of the former Human Engineered Software design is a very topical game. There is plenty of depth to the product, but it lacks the multi-player challenge of EOS and the management verisimilitude of Space M+A+X. Apple, C-64, IBM ($14.95). Circle Reader Service #2.

Broderbund
17 Paul Drive
San Rafael, CA 94903-2101

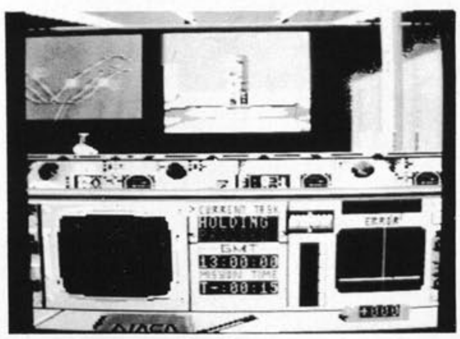
SEARCH AND DESTROY: Players take command of a World War II era ASW equipped Fletcher-class destroyer. The graphics are not as impressive as those in Destroyer, but the game feels more realistic because the player sees essentially what a captain would see in the CIC (Combat Information Center). IBM ($14.95). Circle Reader Service #3.

SUPERBIKE CHALLENGE: Racing aficionados will enjoy this arcade style motorcycle game which contains twelve International Grand Prix courses (Anderstop, Assen, Bugatti, Hockenheim, Jarama, Misano, Mugello, Rijika, Salzburgring, Silverstone,

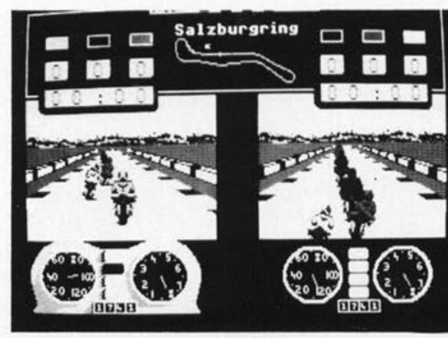
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Apollo 18



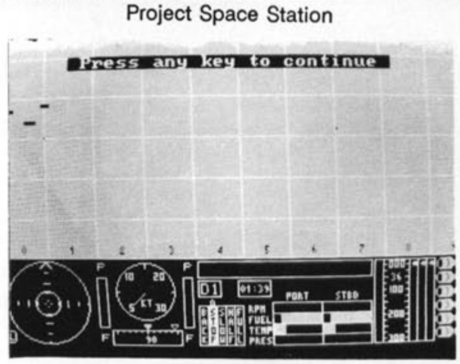
Superbike



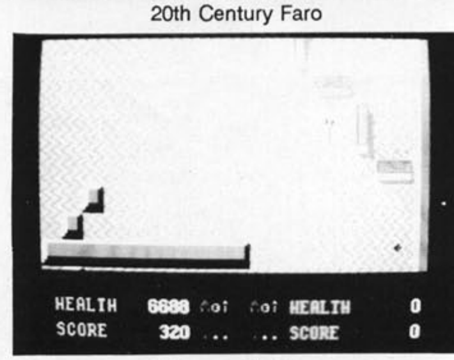
Project Space Station



20th Century Faro



Search & Destroy



Demon Stalkers

Taking A Peek

Continued from pg. 4

Spa, and Suzuka). Each course is scenery specific and players may control their cycles via keyboard or joystick. IBM, ST ($19.95). Circle Reader Service #4.

Cheapware
Robert L. Nicolai
4038 N. Ninth St.
St. Louis, MO 63147

20TH CENTURY FARO: Join the ranks of gamblers from the age of Louis XIV in this latest computerized card game from Robert Nicolai. During the 18th Century, Faro was the most popular gambling game in England. In the "Wild West" era of the United States, few saloons did not have a Faro table. If you like "luck oriented" gambling games such as Roulette or Wheel of Fortune, you will enjoy the 19th Century feel of this fast-playing game. IBM ($30.00). Circle Reader Service #5.

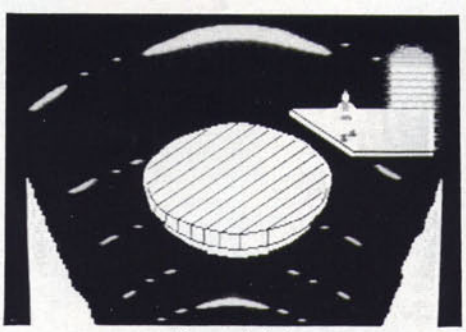
Electronic Arts
1820 Gateway Dr.
San Mateo, CA 94404

DEMON STALKERS: An action game in its own right, this product also features a construction set for creating original arcade adventures. Players attempt to gather relics, scrolls, amulets, bells, chests, and artifacts while avoiding traps and defeating monsters throughout the 100 level dungeon called "Doomfane." If one is successful, he is ready for the final confrontation with the evil demon, Calvrak. C-64 ($29.95). Circle Reader Service #6.

DRAGON'S LAIR: The animation isn't even close to the interactive laser disc version, but there are some beautiful screens in this home computer version of the coin-op hit. The familiar characters (Dirk the Daring, Princess Daphne, and Singe the Dragon) are all here in two different adventures, the original "Dragon's Lair" and its sequel, "Escape from Singe's Castle." C-64 ($24.95). Circle Reader Service #7.

Epyx
600 Galveston Drive
P.O. Box 8020
Redwood City, CA 94063

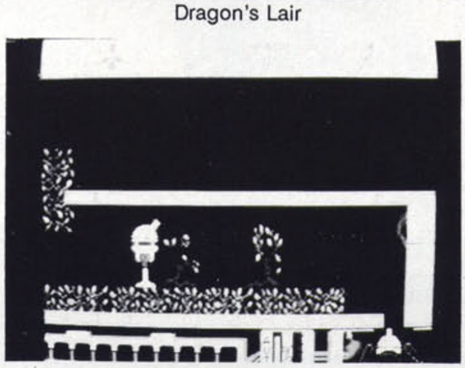
SPIDERBOT: The plot for this arcade adventure revolves around



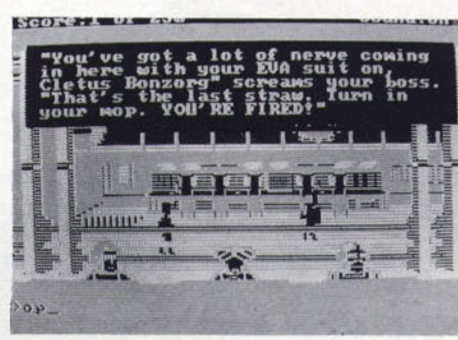
Dragon's Lair



Police Quest



Spiderbot



Space Quest II

three runaway chemical reactors approaching meltdown and a "Spider-Droid," a one-legged robot which uses nets to capture the creatures in the vicinity, must attempt to find the reactors and stop the process. In the tradition of Gobots and Transformers, the "SpiderDroid" can transform into "Spiderbot," a two-legged, ceiling crawling robot that can fire radioactive bolts in self defense (sort of a schizophrenic robotic Spiderman?). Apple, C-64, IBM ($24.95). Circle Reader Service #8.

Sierra On-Line, Inc.
P.O. Box 485
Coarsegold, CA 93614.

POLICE QUEST: This new three-dimensional adult oriented animated adventure is more "Police Story" than "Dragnet." Written by a retired California State Highway Patrolman, this adventure is reality-oriented with a capital "R." Players are expected to follow strict police procedures and everything in the game is based on actual experiences. IBM ($49.95 in both 5.25" and 3.5" formats). Circle Reader Service #9.

SPACE QUEST II: VOHAUL'S REVENGE: He's back! From the pages of "Space Piston Comics" comes Roger Wilco, mild-mannered space janitor who sweeps to new heights of glory in his new adventure. Yes, Sludge Vohaul has devised a new plan to rule the universe (hordes and hordes of bore to bore, er, ah door-to-door insurance salesmen). IBM ($49.95 in both 5.25" and 3.5" formats). Circle Reader Service #10.

Simulations Canada
P.O. Box 452
Bridgewater, Nova Scotia
Canada

LONG LANCE: Grand tactical naval combat in the Pacific during 1942 is the subject of this simulation. The game includes five scenarios from the Guadalcanal campaign and a capacity to "build your own" scenario. In a departure from SimCan's previous format, the playing aids are now coated maps and grease pencils instead of paper maps and cardboard counters. Apple, C-64 ($60.00). Circle Reader Service #11.

TO THE RHINE: As a sequel to the popular "Operation Overlord," this product is part two of a four part series on the Western Front of World War II. This command-oriented study picks up where "Overlord" left off and sets up "Counterpunch," the Battle of the Bulge simulation which is yet to come. More detailed than "Overlord," this design adds airdrops, unit transfers, replacement units, and more detailed supply rules. Apple, C-64, IBM, ST ($60.00). Circle Reader Service #12.

Sir-Tech Software, Inc.
P.O. Box 245
Charlestown Ogdensburg Mall
Ogdensburg, NY 13669

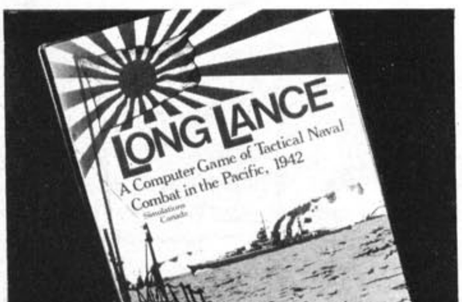
SEVEN SPIRITS OF RA: Based on the cosmic battle between Osiris and Set in the ancient Egyptian mythos, this graphic adventure involves combat and puzzle-solving based on ancient philosophical writings and Egyptian hieroglyphics. The adventure takes place in the "Duad," the Egyptian Land of the Dead, where Osiris must defeat the "Master" (a "devourer of the spirit") of each animal species and survive to experience the Passage of Rebirth. IBM ($49.95). Circle Reader Service #13.

Spectrum Holobyte
2061 Challenger Drive
Alameda, CA 94501

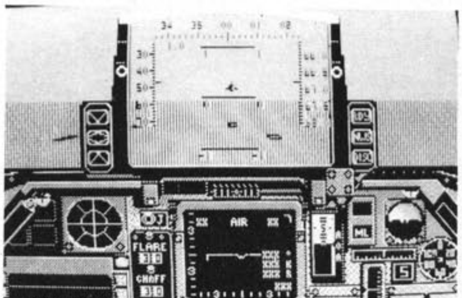
FALCON: This product is a flight simulation of General Dynamics' F-16 Fighting Falcon. Dogfight scenarios allow player/pilots to fight up to three MiGs at a time (remember the movie, "Iron Eagle"?). here are twelve different air-to-ground missions to choose from, as well. A bonus feature includes the ability to dogfight against a friend via a null modem connection. IBM ($49.95 in both 5.25" and 3.5" formats). Circle Reader Service #14.

SOKO-BAN: Tired of those mazes with gruesome ghoulies and other vile villains chasing after you? This strategy maze game is different! In this game, players are warehousemen who must move boxes from one area of the maze to another in the least number of pushes (moves). The game includes 50 levels of increasing difficulty. Workers arise, you have nothing to lose but your maze! IBM ($29.95). Circle Reader Service #15.

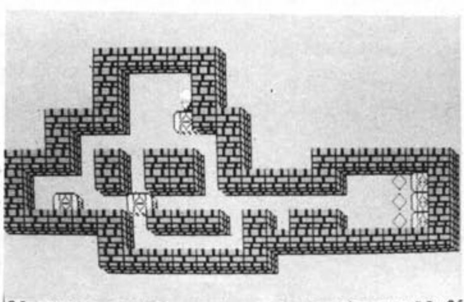
Please fill out Reader Input Device on Pg. 55



Long Lance



Falcon



Soko-Ban

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A regular contributor for Questbusters, *Tracie introduced herself to CGW's adventure game enthusiasts with her review of* Shadowgate *(November, 1987). This issue, she zeroes in on a popular action-strategy game.*

An Adventure Gamer Looks "Into The Eagle's Nest"



TITLE: Into The Eagle's Nest
SYSTEMS: Amiga, Apple II, C-64/128, IBM
PRICE: $29.95 (Amiga $39.95)
PUBLISHER: Mindscape, Inc.
Northbrook, IL

by Tracie Forman Hines

With the growing popularity of fantasy role playing games, it is almost surprising to find a new action-strategy game—and a good one, at that. *Into the Eagle's Nest* is reminiscent of the old hit, *Castle Wolfenstein*. The premise is very similar: your mission is to penetrate a four-level Nazi fortress and defeat all comers in a quest to rescue a prisoner hidden somewhere inside. Survive three rescues and you get some new orders: to assemble a four- part bomb and blow up the castle once and for all.

Along the way, you will find a number of items that help ensure your survival: extra rounds of ammunition, treasures such as artworks and jewels that add points to your score, elevator passes that allow entry to new levels of the fortress, keys that open locked doors, and most important, food and medical kits to heal some of your fighter's wounds. You might also find bombs hidden in the boxes that sometimes house treasures. Be careful, however, when shooting these boxes open, since hitting an exposed bomb detonates it and the game automatically ends.

Upon entering the fortress, you will find yourself presented with a bird's-eye view of a passageway patrolled by Nazi guards. Be alert and take cover as much as possible, since the guards can attack you from all sides. Each guard must be shot twice in order to eliminate them and getting caught in a crossfire causes you to suffer far more damage than the enemy does.

Each level of the maze remains the same from one game to the next, so you will soon learn the best way through each level. Doorways barred with yellow barriers can be opened if you bump against them, but be prepared to retreat to relative safety and blast away at the guards inside as soon as the door is opened. Gray doors require keys (which can only be used once per door). Fortunately, once a door is open, it remains that way as long as you stay on that level.

Note also that the guards are incredibly stupid, so it is easy enough to manipulate them into attacking you one at a time. Just lure a group of them around a corner and stay hidden until a single guard appears. Then, blast him and repeat the maneuver until all the guards have been destroyed. A few rooms even contain drunken officers, unconscious slouchers who sit with their heads on their tables. They can be killed with a single shot for a lot of extra points [Ed. Note: Killing drunks give you extra points? What are we coming to?], and these rooms often contain goodies like treasure and medical kits.

A word about the medical kits and food rations should be in order here. While it may be tempting to grab the prizes as you go, keep an eye on your damage points and only use as much medicine and food as you need. In your travels, you are sure to take plenty of damage (especially since you cannot see or hear the guards' shots and can only keep track of your health by watching your damage meter), so leave enough medicine to see you back to health when you really need it. Backtrack to food and medicine caches when you are down to 25 hit points (halfway to death, as it were).

The same point can be made with regard to ammunition. Your soldier can only carry 99 rounds, so picking up more is not only useless, but foolish since excess rounds disappear when you pick them up. It is better to leave a pile of ammo safely behind, where you can go back for it, than to grab it all and find out later that you desperately need it. Ammo is especially important when you find walled rooms blocked with green orbs that must be shot through to gain entrance. It is a good idea to blast a path straight through, then wait for the guards inside to approach the cleared area. That way, it is easy to eliminate the guards without placing yourself in much danger.

I found that it is crucial to keep extra keys on hand, since you can get all the way to the prisoner only to lose the game for the lack of a single key to get through that final door. Once you find him, coaxing him out can be the hardest part of the game. The prisoner is highly disoriented and follows you blindly, even going so far as to trap you in a corner in his anxiousness to please. Sometimes, you have to fire a warning shot in his direction (don't worry, I haven't accidentally killed him yet) to get him moving in the direction you want him to go.

Once you have led the prisoner safely to the main floor (using elevator passes) and out the main gate, it is on to the second rescue. This, frankly, is where I have the only problem with this game. Each fortress is exactly alike, down to the types of treasures found in each room. After having so much fun exploring and mastering the first fortress, players rightfully expect to face brand-new challenges as a reward for their derring-do. It was very disappointing to find the same series of rooms as in the first castle.

Aside from that, *Into the Eagle's Nest* was some of the best fun this jaded critic has had in ages and it is a game that most people will go back to time after time. Strategic shootout fans will find this one a blast.

BREACH

"I was moving a squad of four of my best through the *kehst*-beridden jungles of Kiskismok, when suddenly Darrow's detector picks up what looks like a couple of life forms 50 meters out."



"'Nothin' but a couple of those brachiators,' he says to me. Just then Darrow takes it through the chest."

"We all drop into the mud, flipping through our helmet displays trying to find out where the shot came from when I hear this rumbling. More like I *feel* this rumbling. An' then there it is. A battle robot."



"Hsiang shoots the thing in its sensory grid with a bolt, but it doesn't do much good 'cause he's a psionic talent and they don't give 'em half-way decent guns. It starts tracking him with its dual guns and suddenly he takes some hot plasma too. Now it's just me and the kid, Yamaguchi."

"'Guchi,' I said, 'Direct your fire into the lifters so it can't move. These things are pretty lousy about protecting their undersides.' So like he was a vet of 20 drops, he rises to one knee and hits the thing right in the lifters. And then he does it twice more."



"'One battle robot: out of action,' he says. I toss an energy grenade at the hulk just to make sure and then we start the long job of carrying the boys north, where we know the landing boat'll be."

The Serayachi Campaign—Sgt. Robert Sherwood, FWSF *Ret.*

Breach is a single-player tactical-level combat game for one person. It features:



- Smooth animated movement and combat.
- Macintosh™ version includes digitized sound.
- The ability to lead squads of up to 20 marines.
- A campaign of several scenarios included with the game.
- Up to 40 opponents per scenario—ranging from vicious beasts to marines as intelligent and well-equipped as your own. Six different classes of opponents in all: marine, alien, beast, overlord, autogun, and battle robot.
- Equip your marines with 20 different types of objects—including rocket launchers, demolition charges, first aid kits, and cracking units to break into enemy computer systems.
- Four different classes of marine: marauder, infiltrator, scout, and psionic talent.
- Your squad leader is independent of any scenario—play **Breach** just like a role-playing game *or* as a single session wargame.
- Build-up your squad leader for special advanced training—all of his combat experience is saved!
- **Breach** includes a **Scenario Builder**—create your own scenarios or modify existing ones!
- Scenarios can have several different victory conditions which can be mixed together to form extremely complex battles.
- Additional scenario disks available soon!

Breach is available for the Atari ST, Macintosh, IBM, and Amiga. Photos are for the Atari ST version.

To order, visit your software dealer. For direct orders (VISA/MasterCard/COD), phone (203) 658-6917. To purchase by mail, send check, money order, or credit card information to Omnitrend Software, Inc., PO Box 733, West Simsbury, CT 06092. Cost is $39.95 plus $3.00 for shipping and handling.

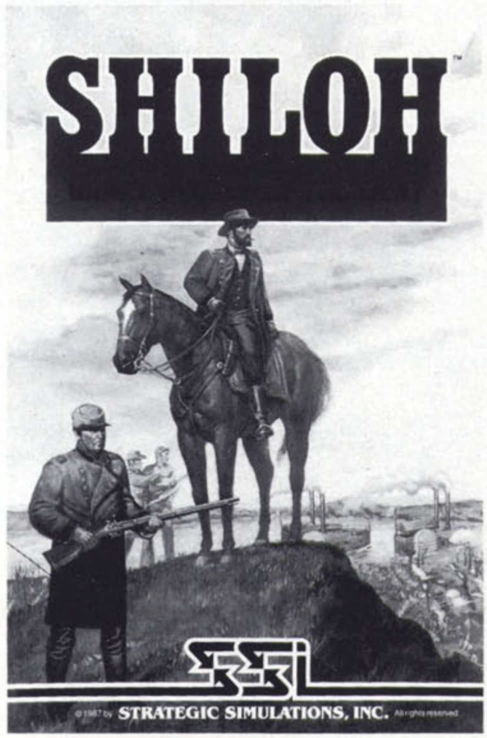
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BULLETS FOR BREAKFAST

The Battle of Shiloh

Review by Jay C. Selover



TITLE:	Shiloh: Grant's Trial In The West
SYSTEMS:	Apple, Atari 8-bit, C-64, IBM
# PLAYERS:	1-2
PRICE:	$39.95
DESIGNERS:	Chuck Kroegel David Landrey Brian Hermundstad
PUBLISHER:	Strategic Simulations, Inc. Mountain View, CA

Dr. Jay Selover, editor of Fire & Movement *magazine, is a frequent contributor to* CGW. *For "The Grand Age of Warfare" issue, he has evaluated the American Civil War series from Strategic Simulations, Inc., reviewed the latest release in this series, and offered strategic notes for both sides.*

The Bottom Line: The ACW System

Let's get it out of the way right from the start the "bottom line." *Shiloh* locks up **SSI**'s position as the producer of the finest operational level American Civil War system to date. Why? Frankly, it is not so much any one feature of the game, as it is the evidence that the design team at SSI continues to be sensitive to the voice of the public. Someone at SSI is obviously reading the feedback cards and looking for ways to incorporate suggested changes into each of the releases. [*Ed. Note: Jay has not had an opportunity to see SSG's new American Civil War game that is mentioned elsewhere in this issue.*]

With that out of the way, let's go back to the beginning and take a brief overview of the SSI Civil War system. Shiloh is the fourth release in a series which has included games on Antietam, Gettysburg, and Chickamauga. It covers the two-day battle (April 6-7, 1862) using hour-and-a-half turns. Map squares represent 200 yards and the units of maneuver are brigades (though each brigade can be broken down into two separate units for independent maneuvering). Physical components are standard SSI fare (very good); the game disk, a sixty page rules booklet, and a laminated player aid card/map representation. The rule book includes eleven pages required to play the "basic" game, sixteen pages required for the "intermediate" and "advanced" games, complete orders of battle along with organization tables, several pages of data on how the computer calculates various functions, and an excellent 13-page historical account of the battle (with four situation maps showing where the historical forces were on the game map at various points in the battle). All of these features have become standard with the system, but that does not diminish their value. The amount of information given the player to allow for both historical understanding and efficient play of the game can be held up as a standard for other computer wargame producers.

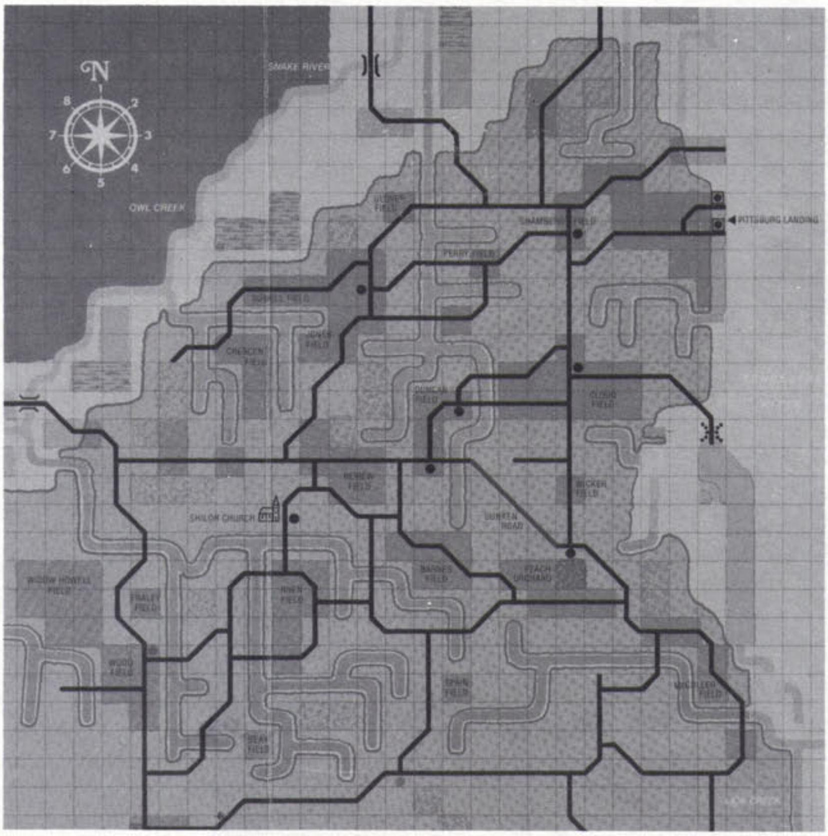
The game system itself involves standard player turns where Confederate forces move and attack, Union forces do the same, and then, each side repeats their move and attack sequence one more time. Units include infantry and cavalry brigades, artillery batteries, and two individual Union gunboats on the Tennessee River. Units are rated individually for manpower (and number of guns for artillery units), efficiency, fatigue, morale, weapon type, ammunition level, mode (line or column), facing, fortification level, command control level, rout status, and disruption status.

The heart of the system involves the "operation points" (Op Points) that each unit receives each turn. These are used for movement, reorganization, mode changes, building fortifications, resting, fire combat, and melee combat -- if you want to do *anything* with a unit, it will need to have enough Op Points. The two features which really come into sharp focus in playing the game are fatigue and command control. Units gain fatigue when moving, fighting, taking casualties, and building fortifications. It is amazing how quickly fatigue mounts up when you force a unit into continual combat for a couple of turns (remember, two turns represents three hours of fighting). Fatigue is much more likely than sheer casualties to cause a unit

to rout and routing units simply run away from the battlefield, useless for anything until you can get them to reform (some routed units become useless for the rest of the game). Command control has been a key feature in the SSI system since the first release. Although brigades are the units represented on the map, the division and corps commanders are also present, assigned to particular units of their command. Units near their commanders will get the most Op Points to use each turn, while those whose divisional and corps commanders are a distance away will have their movement and combat capabilities much reduced. Keeping your leaders up front in the thick of the fighting will get the most out of your troops, but unfortunately, it will also probably get a considerable portion of those leaders wounded in combat (or, even worse, captured), and the cost in victory points for wounded leaders is very significant. If you have not seen or heard about any of the previous releases, take my word for it that just about anything you could hope for in terms of the factors influencing warfare during the Civil War is included. Also, with the inclusion of the "basic" game, you can just as easily opt for a bare-bones, quick and easy game.

Specifics in Shiloh

What, then, is new in *Shiloh*? First of all, the battlefield is new and the size of the battle is refreshingly small. Both Gettysburg and Chickamauga involved very large forces and large maps, but Shiloh seldom requires the strategic map view (though it is still available). The terrain present in Shiloh is similar to Chickamauga (lightly to heavily wooded in most areas), but in this case the playing area naturally constricts towards the primary Confederate objective at Pittsburg Landing. Imagine the Confederate army attacking down a funnel (from



the wide end down towards the mouth) and you will have a feel for how tough it can be to capture the final victory squares.

In all, some fourteen new features have been added to the SSI system for Shiloh. A few are specific for this battle (such as the Union gunboats Lexington and Tyler), but most represent additional system refinements. Premier among these is the inclusion of "untried" units. All units begin the game without an assigned efficiency rating; they are simply classified as "Green" or "Regular" (depending on whether that particular unit had ever seen combat before). During a unit's first exposure to combat, an efficiency is assigned (randomized each game, but within set limits). Another change relative to efficiency is that units with starting efficiencies of less than forty will never rally if they rout (they will sit out the entire rest of the game, useless, in routed status). These two new rules do a great job of presenting you, the commander, with the problems which occurred when so many new troops got their first taste of combat. The Union commander must be very careful to avoid a reenactment of the historical scene of thousands of troops cowering at Pittsburg Landing throughout the battle.

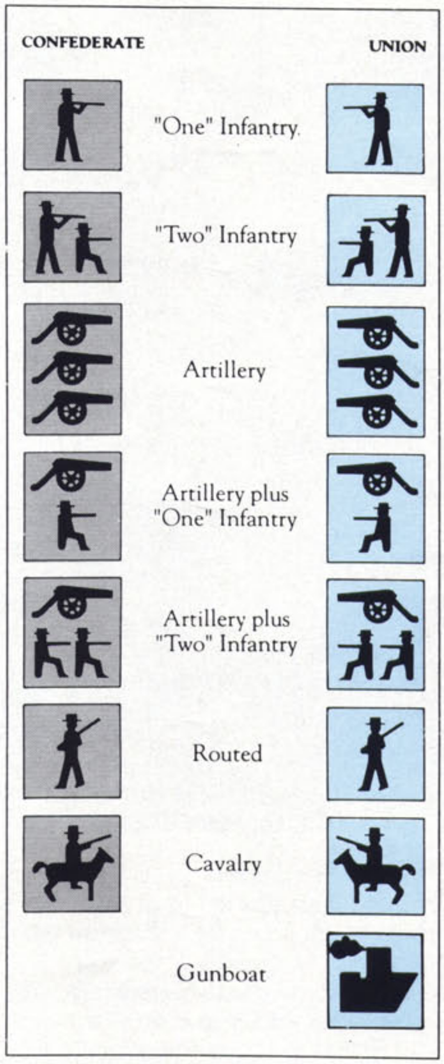
Tips On Play

Most of my tips apply to solitaire play against the computer. When dealing with overall strategy, you can take advantage of tendencies the computer opponent consistently exhibits (humans tend to be much less likely to stick to the same plans game after game!).

The Confederate player obviously needs to attack hard during the first day of the battle. He should take to heart the suggestion in the rulebook that he concentrate on chewing up Grant's army and forget about capturing Pittsburg Landing (it simply can not be done unless all of the "fudge factors" are set strongly in one's favor). The initial set-up has Bragg's two divisions (Ruggles and Withers) behind and on either side of Hindemann's (the only division in Hardee's Corps). If everyone just starts advancing northeast, one ends up with Bragg's Corps split (Ruggles tends to end up west of Shiloh church and it is very tempting to send Withers looping far around the right flank towards the Peach Orchard). Resist the temptation and take the extra time to form

up Bragg's Corps on the left flank and advance through Widow Howell Field into the Union right flank (probably Sherman's feeble division). This leaves Hindemann in the center and no one on the right during the first few turns. Hindemann's division should advance immediately and try to nail Prentiss' division during the first turn in Rhen Field (Peabody's brigade often routs in it's first combat, never to be seen again!). After that, the center becomes an area of advancing square-by-square against a variety of Union units. Polk's Corps should be committed to the center as it becomes available; supporting and then, taking over for Hindemann.

What, then, about the Confederate right flank, so much discussed historically as a wasted opportunity? The problem is that the computer-led screening force (Miller's and Stuart's brigades, plus some cavalry) is good. Though they give up ground easily, they slow the advance somewhat and generally do not take heavy casualties. They simply will not stand still and take it on the chin. Instead, they retreat back to the Sunken Road, where consolidated Union forces make a pretty strong stand. Hence, leave the right flank for Breckinridge's reserve division. When they finally activate, one can practically road march them to the Peach Orchard before they will see any Union Troops (the computer will retire the Union left flank if pressured with a mere cavalry brigade). They enter the battle fresh and are set to crack the left end of the Union defense on the Sunken Road. Here, then, is my suggested Confederate disposition with a line from Crescent Field through Review Field to the Sunken Road by about 11:00 A.M. From left to right, the line includes: a couple of cavalry brigades, Ruggles, Withers, Clark, Cheatham, Hindemann, and Breckinridge (with more cavalry). During the midday, crack the defense at Crescent Field and the Sunken Road by encirclement (the Sunken Road in particular is tough to assault head on). An attack up the middle towards Duncan Field by Polk's Corps and a flanking move around the Peach Orchard towards Wicker Field by Breckinridge (both of these should be the fresher formations in your army) can bag a lot of captured Union troops. Finally, remember that any breakthroughs or openings will pay more dividends if turned



into isolations of Union forces than by sending troops forward towards Pittsburg Landing. Confederate players can feel comfortable if evening finds their line running from Sowell Field over to Cloud Field. Use the night to straighten up the line and fortify (there is *no* reason to retire back to the Union camps as the Confederates did historically!).

During the second day, confederates should hold on as well as possible and remember that they had their fun on the first day. All of the infantry will probably be needed on the line, but the cavalry can be well utilized as reinforcements spread out in the rear. Their extra movement lets them jump around to bolster weakened sectors and cover the retreats of exhausted troops -- kind of like Civil War *kampfgruppen*!

For the Union player, the first day is mostly a matter of responding to Confederate moves, giving ground while minimizing losses (the territory can be retaken tomorrow, but the dead and captured cannot be brought back!). Prentiss and Sherman take the brunt of the initial attack. All they can do is fall back in as orderly a fashion as possible. I always try to get Stuart's lone brigade pulled all the way from the left flank over to the rest of Sherman's division immediately. Their absence can be covered with cavalry and the computer does not press that flank initially. They can usually arrive just in time to keep the rest of the division from completely falling apart in front of Crescent Field. As Hurlburt's and McClernand's divisions activate, move them to the Sunken Road and Crescent Field (respectively) where the Union can make its first stand with what remains from Prentiss and Sherman. W. Wallace's division will probably be used in the center (when they finally get forward) and the later arrivals (L. Wallace and the first elements from Buell) can be assigned to the weakest areas as they enter the battlefield.

Tactically, the Union forces must avoid localized encirclements at all costs, even if one must cut and run with the entire line for a couple of squares. Having good command control (maximizing the Op Points for each unit) is important. Failure in this area is often a reason that Stuart's men get gobbled up on the left flank when a human opponent attacks there in force. It is also easy to get the Union artillery units into very sticky situations if one is not careful. When they fire, they gain fatigue (very quickly). If they are on

(Continued on page 16)



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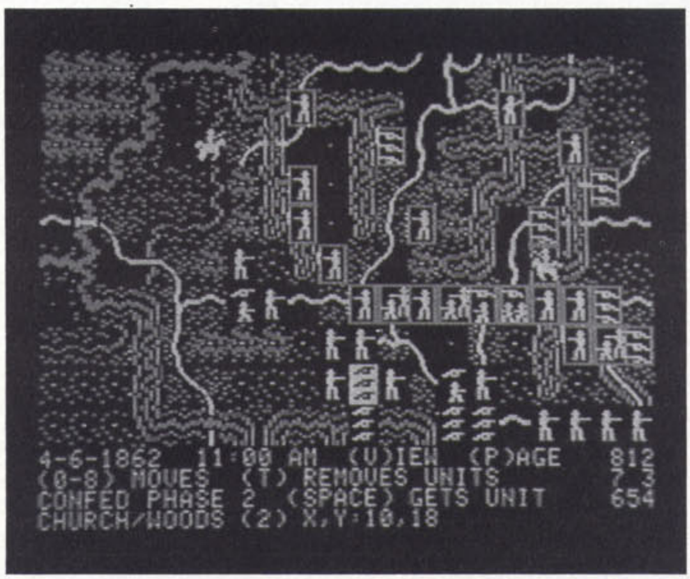
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The Battle of Shiloh

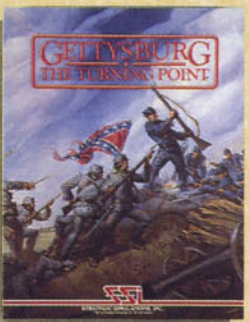
(Continued from page 14)

the line and fire in all available phases during a turn, they may only have six Op Points when it is time to retire. Unless one likes the idea of leaving them all behind, Union artillery should probably occupy only two positions during the first day. The first should support the Crescent Field to Sunken Road line and the second should overlook the Perry Field to Cloud Field area.

The Union player can take heart, even if the first day finds his forces pushed all the way back to the Chambers Field/Pittsburg Landing area, *if* he has conserved the bulk of his army. He will be ahead on points



(after discounting the Confederate points for victory squares which he can recapture on the second day). If he isn't ahead by this calculation, there is nothing to be done. If he is, the following applies. During the second day, territory is more important than it was for the Confederates on the first day. The Union must recapture most, if not all, of the victory point squares. Fortunately, the superior number of Union forces for the second day allows for deep penetrations with plenty of units to feed through the gaps and reinforce the flanks of the spearheads. Of course, the Confederates are likely to respond to any breakthrough by retiring the entire line. The exact moment to break off an advance and turn it into an encirclement is an art which generals throughout the ages have struggled with. Now, it's your turn!



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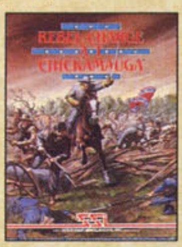
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DESIGNERS:	Lawrence Schick Scott Spanburg
PUBLISHER:	Microprose Hunt Valley, MD

AIRBORNE RANGER

by Kevin Rohrer

Kevin Rohrer is one of our most vocal and long-term readers. His "Reader Input Device" card is usually one of the first to arrive for every issue and invariably has a comment on it, be it critical or complimentary. In his first review, he looks at Microprose's new action-strategy game.

Throughout U. S. history, it has been the mission of the U. S. Army Rangers to seek out the enemy, wherever he may be. From the time of Roger's Rangers, a unit used by the British to patrol the American wilderness during the French and Indian War, Ranger units have upheld a proud tradition of versatility, independence, and toughness. The primary mission of the Rangers is patrol. Indeed, they are trained and equipped to reflect that mission. Combat is left to larger, more conventional units, while Rangers fight only when necessary. Stealth is both their major strength and greatest ally. When a fight becomes necessary, however, it is swift and deadly to the enemy.

Microprose's new arcade/strategy game, *Airborne Ranger* (AR), gives you the chance to perform twelve different missions that Army Rangers might perform or have already performed somewhere in the world (e.g. Destroy a Munitions Depot, Capture an Enemy Officer, or Liberate a P.O.W. Camp). When play begins, however, players will probably be reminded of an earlier arcade game entitled, **Commando**. Both games use the same basic premise (i.e. an individual soldier which must move from point A to point B, dodging or killing enemy soldiers and destroying fortifications). Have no fear, however, AR is not a simple rehash of Commando. It is an entirely new product with much depth and versatility.

There are two modes of play: Practice Ranger and Veteran. In Practice mode, parachute landings cannot go wrong, but scores cannot be saved to the "high scores" list, either. Points are scored for enemy killed, fortifications destroyed, and



missions accomplished. Veteran Rangers that successfully accomplish their missions (and live to tell about them) will receive promotions and awards. They can also be saved to a separate data disk and saved for future use.

Movement and weapons are controlled by the joystick and keyboard. To start, one of twelve missions may be selected. Missions are rated for difficulty from one (easy) to nine (suicide). Within these base ratings, the difficulty can be increased by using the joystick to move a sliding scale depicted on-screen. Increasing the difficulty rating adds enemy fortifications and makes enemy soldiers smarter, faster, and better marksmen. Any mission played at five or better is tough to accomplish.

Actual play begins by flying over the randomly generated mission area in an Osprey V/STOL aircraft and dropping three supply pods along the way. When the green jumplight flashes and the buzzer sounds, one must "hit the silk" and maneuver his parafoil to a safe landing.

Upon landing, the scene changes to an aerial view of the ranger in enemy territory. One must use the joystick to crawl, walk, and/or run him toward his objective, picking up supply pods as he goes. Your ranger carries an M-16 rifle, grenades, light anti-armor rockets (LAW), a knife, and time bombs. Unlike Commando, one does not have an inexhaustible supply of weapons and ammunition, so conserving ammunition is a must. Speediness is also necessary, since one is racing against an on-screen clock. If one does not complete the mission and arrive safely at the pick-up point before the allotted time elapses, the character dies or experiences imprisonment.

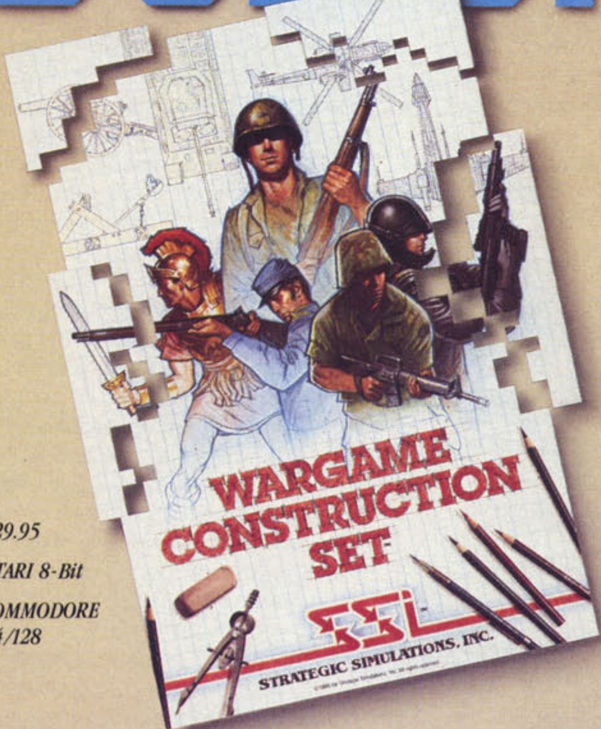
The game includes a map of the mission area which can be accessed at any time. Utilization of this map allows one to plan the safest route of approach to the objective. It also serves as a game pause to enable one to cope with life's little distractions. The game's graphics are colorful and interesting. The animation is smooth and the sound is excellent. For example, one can hear enemy soldiers walking towards one's position before they become visible. Also, gunfire from enemy soldiers outside of fortifications is qualitatively different in sound than enemy fire from inside a fortification. These are all welcome features.

Further, unrealistic situations do not occur in AR. For example, concrete pillboxes cannot be destroyed with gunfire or a grenade. A LAW (light anti-tank weapon) or time bomb is necessary in order to blow them up.

With its fast play, as well as great graphics and sound, this game is certain to appeal to both youth and adults. The twelve missions and variable difficulty levels will also mean that gamers should not grow tired of it very quickly. Microprose is sure to have a winner with AR.

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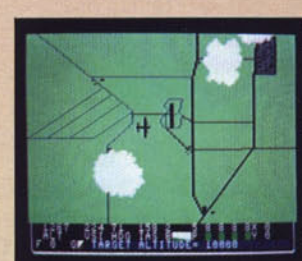
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Scorpia's regular hint column examines Infocom's latest release and updates readers on "bugs" in another Infocom game.

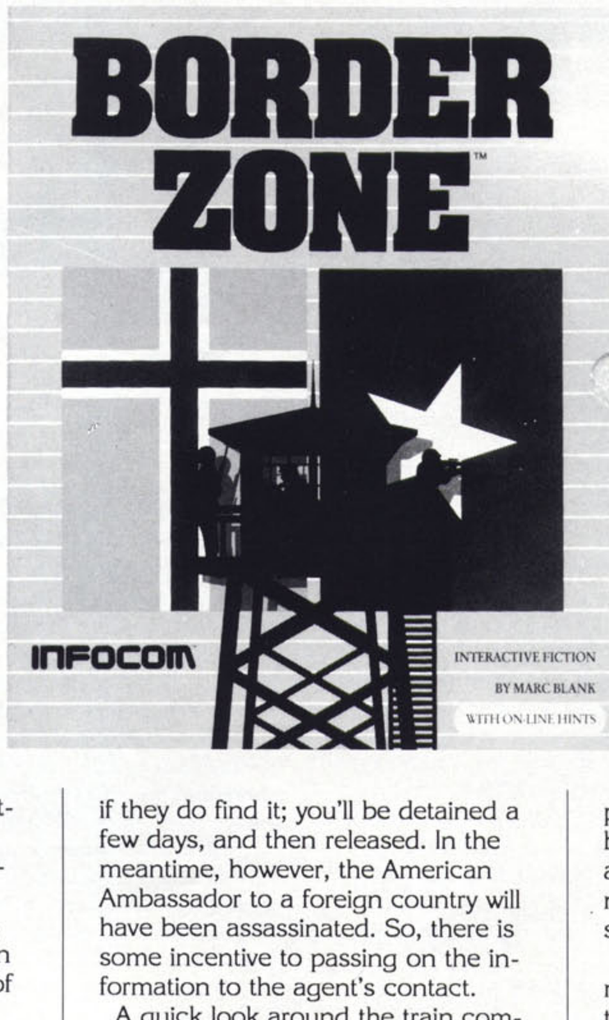
Brrr! Those icy January winds can really get to you! So, don't just stand there in the doorway (it's *cold* out there!), come inside and warm up by the fire. Fred is mixing up a little something to warm your insides, too (just sip it first; Fred's been dipping into the Alchemy books again). When you're a bit thawed out, we can talk about something contemporary this time: spy stuff, intrigue, and all that cloak-and-dagger kind of thing.

Border Zone, **Infocom**'s first venture into spy/intrigue and real-time action, turns out to be something of a disappointment. This is due in part to having three small games instead of one large one on the disk and also, because most of the puzzles are trivial in nature. In fact, only the ticking of the game-clock brings any difficulty to the games. Further, few people are likely to have much trouble completing Border Zone, as clues are provided within the scenarios themselves via a "Hint" command, the same as is found in Nord and Bert.

All three mini-adventures are set in the mythical Eastern Bloc country of Frobnia, although each is played from a different point of view. In scenario #1, you are an American businessman, thankfully on his way out of Frobnia, heading for the border of a neutral country.

At this point, in the best tradition of British spy novelist E. Phillips Oppenheim, an American spy barges into your train compartment, dripping blood all over the floor. He thrusts a document into your hands, pins a carnation to your suit, and mutters that you will have to deliver the information while he leads his pursuers on a merry chase elsewhere. Exit the agent, leaving you with an unreadable paper written in Frobnian and not much time before the searchers arrive.

The major focus of this mini-adventure is keeping the police from discovering the document. *You* don't really get into much trouble yourself



if they do find it; you'll be detained a few days, and then released. In the meantime, however, the American Ambassador to a foreign country will have been assassinated. So, there is some incentive to passing on the information to the agent's contact.

A quick look around the train compartment does not yield any good hiding places. It's a pretty bare room. You certainly can't just stick the thing in your pocket or briefcase (interestingly, you have no luggage, just the briefcase). It would be found there without any difficulty at all. No, I wouldn't recommend under the seat, either. It would be just a trifle obvious, even folded up.

The solution to the document puzzle is slightly more subtle than that. Still, if you look over what you have with you, you might get an idea or two. There is a fair amount of time in this scenario to try different things, as the clock ticks slower here, giving you more leeway. Nonetheless, that clock *is* ticking away, and events are moving forward, even though you may be doing nothing at all (except staring at the screen and thinking).

Eventually, the police will reach your compartment and subject both you and it to a thorough search. The blood on the floor will not go unnoticed, either, although you can probably talk your way out of that one.

Presuming that the paper hasn't been discovered, your next (and final) task is to deliver the information. This is fairly simple. When the train reaches the next station (the one just before the border), everyone is ordered off, so the train can be searched more completely. It's while wandering around on the platform that you have the opportunity to pass over the information. As long as you aren't obvious about your actions, you should be able to manage this without being spotted. That pretty much takes care of the first scenario.

In the second one, you are the wounded American spy, codenamed Topaz. The action picks up after the document has been handed to the businessman and you have jumped from the train near the border. Your task is to get safely across into neutral territory.

This one is tougher, as you have more to do, and the clock is now ticking on fast time. If that's too fast for you, you can always enter a command and make it slower. You will also need the map that comes with the game, so you know where things are and how to get to them quickly. After all, a pack of dogs is on your trail, too.

From the map, you can see that a small house and shed aren't too far away. Of course, you wouldn't dream of trying to hide out there, since all buildings in the area likely

to be searched. On the other hand, you jumped off the train with very little in the way of possessions, so you might, at least, find a few useful items to help you out.

Getting inside the house will take a certain amount of timing, but it isn't hard. The shed is even easier, as no one is around. The difficult part will be getting past the border checkpoint. You can't simply waltz past it; there are guards and watchtowers with searchlights that must be evaded, and two fences that must be passed.

Once you reach the area of the checkpoint, your attention should be concentrated on the guards and the lights. You will soon notice some patterns there, and reaching the first fence is only (!) a matter of careful timing. However, that clock is still ticking, and the guards are still making their rounds, so you must do something about the first fence pronto.

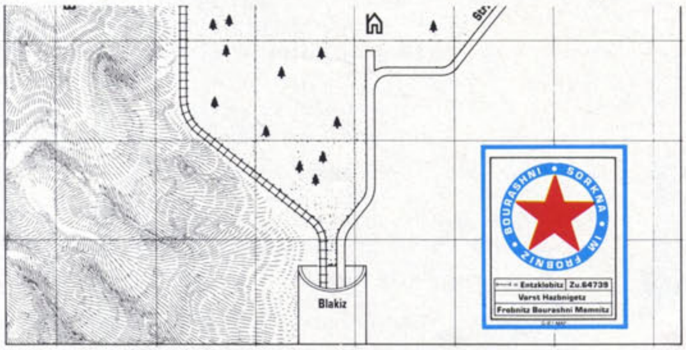
Now, you're under the watchtower, between the two fences. A good look at the second fence tells you that this one is a much tougher nut to crack. In fact, you probably won't be able to get through it the same way you did the first one. I'd even venture to say that nothing you have with you could get you through that fence directly. There are some indirect ways, though. This is a pretty tall tower. Think about it. Once over the border, the second scenario ends.

The final scenario puts you in the role of Viper, the KGB agent who was searching for the document on the train. However, Viper isn't merely an enemy agent; he's actually a double agent, working for the Americans. Not many people know about that (not even Topaz), and Viper would like to keep it that way.

Viper has a problem: now that he's set up the assassination of the American Ambassador, he has to find a way to stop it, without allowing himself to become directly involved.

Time in this scenario is shortest of all. Not only is the clock ticking away in fast time, you have barely an hour to find out where the assassin is hidden and prevent him from killing the ambassador. To make things even more difficult, Topaz is in the area, too.

Your best bet here is to first save the game after entering the scenario, then move around the area learning where things are. The tiny map on the business card can help you to orient yourself.



Once you've found out where the assassin is and how to get there unnoticed by the hordes of police in the vicinity, you can restore and get down to the matter at hand. The assassin is always in the same place, so you don't have to repeat the steps necessary to locate him.

The major difficulty at this point is that, although the assassin will let you into the room with him (you know the right password), he is extremely nervous and doesn't trust you very much. If you try to pull a gun on him, or interfere with him in any way, he'll just blow your head off. Since this is not exactly what you had in mind to happen, you must find some other way of stopping him.

Remember that you don't want to get your own hands dirty in this matter. If you could get someone else to do the dirty work for you, you would have scotched the assassination, while still not becoming involved to the extent of blowing your cover.

This means, of course, that you can't just walk up to the nearest cop and tell him about the assassin. Your superiors back home might get the wrong ideas about you. You can't tell anyone else, either, but . . . perhaps you could trick someone into doing the job for you. All you need is to be in the right place at the right time and then, run like hell. There's nothing like a brisk game of follow-the-leader to get the blood moving (or perhaps that should be: flowing). The death of the assassin, and the exit of Viper from the scene, ends the final scenario.

One problem with these Border Zone scenarios is that they are all stand-alone adventures. What happens in one has no effect whatsoever on any of the others. For instance, if you fail to deliver the information in scenario #1, it means nothing at all in scenario #3, which begins with the assumption that the information was properly delivered.

Even worse, a careful examination of the first and third scenarios shows that delivery or non-delivery of the document is totally irrelevant to the action. Viper doesn't need that document, as it was stolen from him in the first place by Topaz. Viper already knows about the assassination, and is out to stop it however he can. The document is really superfluous, which in turn pretty much makes scenario #1 superfluous, too.

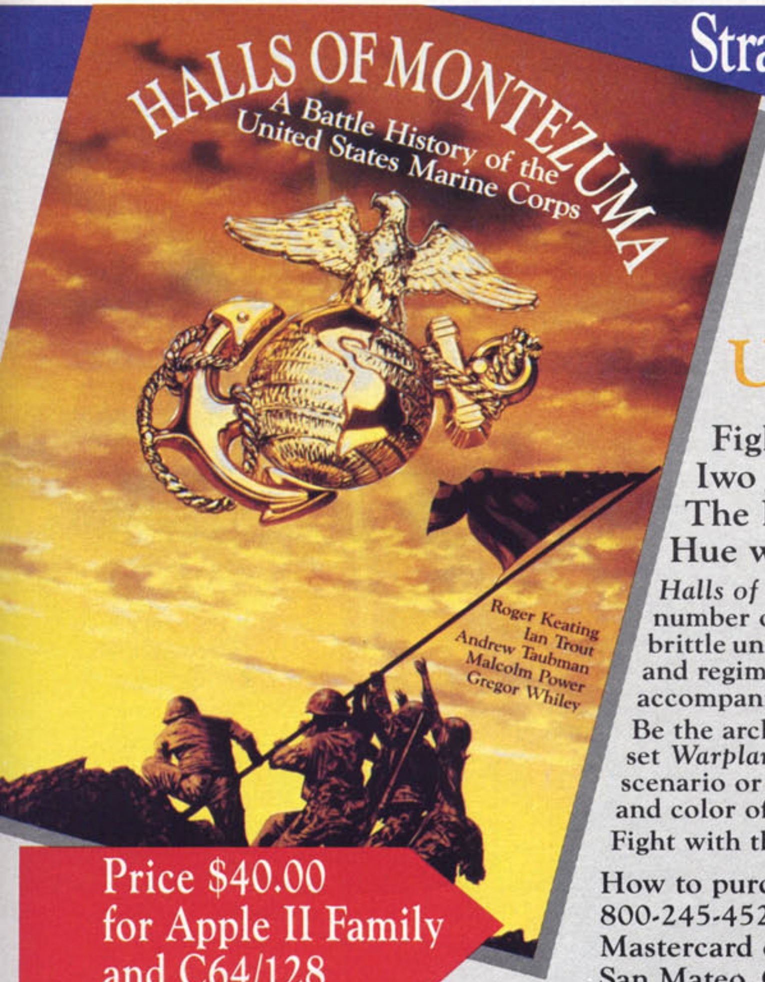
All this makes for an unsatisfying experience. Who cares if the information is delivered or not or whether or not Topaz gets across the border? Everything is just fine in scenario #3, where all has already happened as it should.

Border Zone would have been far better as one single, combined game, where the events in one area had a true and important effect on events in a future area. Even allowing for this in the individual scenarios would have improved the game greatly. As they are now, the scenarios are excruciatingly linear in design, with only one right way to do them, and have no real interconnections among each other.

The real-time aspect is only partially so; you can, in fact, pause the game almost any time you want to. This is necessary for reading long text passages on the screen, but you

(Continued on page 23)

Strategic Studies Group Presents ...



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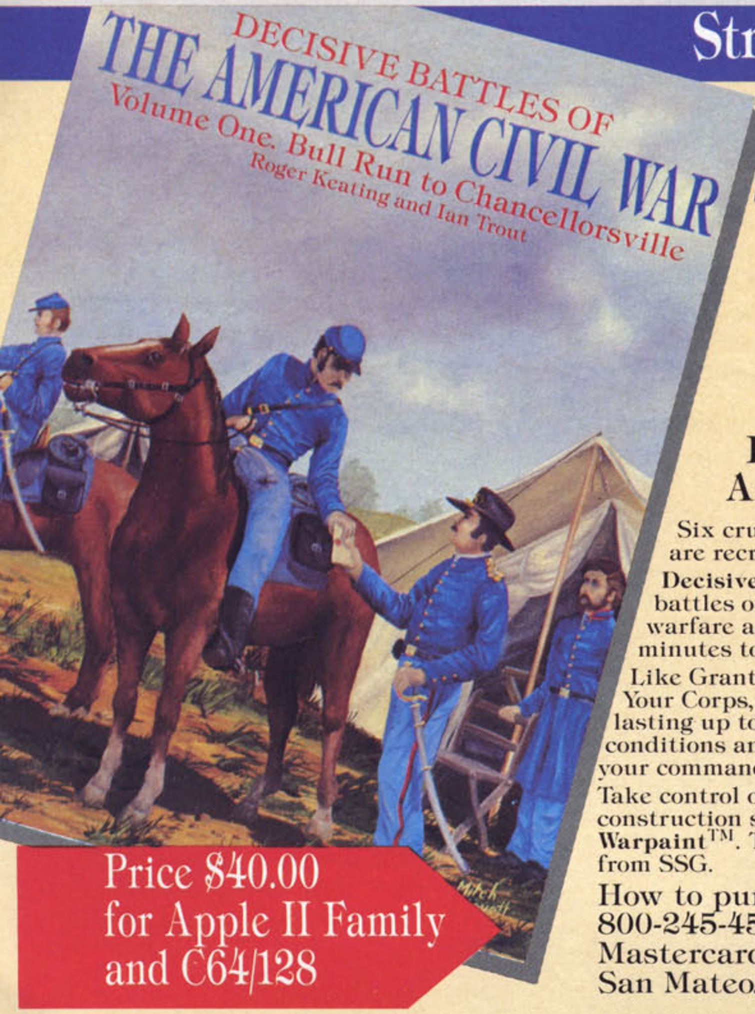
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BORDER ZONE

(Continued from page 21)

can also use it to stop the action while you take out time to think. The necessity for giving you a chance to read also defeats the purpose of the real-time clock.

What sharpens the disappointment is the fact that Border Zone was written by Marc Blank, the man (actually one of them) who gave us Zork. Had I not seen his name on the box, I would never have believed this was one of his products; the game does not come across as a top-notch effort.

So, there you have Border Zone, one of Infocom's weakest games to date. This is not to say that some people won't enjoy it, but at least you know what you're getting into.

Fred Warms Your Cup With "Beyond Zork" Bug Problems

After my original article on Beyond Zork went to press, I was advised of some flaws in the game that may prevent people, especially Mac users (and perhaps of other versions as well) from completing the game. First, under no circumstances should you open the Shady Wall. If you have opened that Wall, make sure you close it again before going to the other wall. Otherwise, you will not be able to finish the game. A bug in the program prevents a certain item from lasting long enough if the Shady Wall door is open.

The second problem is in the Fields of Frotzen. If you hear the farmhouse come down, but you go to all the accessible areas and don't see it anywhere, restore the game to the point before you entered the Fields, and try again. The farmhouse came down behind the corbies (where it isn't supposed to), and you'll never be able to reach it.

Well, it's that time again. As always, if you need help with an adventure game, you can reach me in the following ways:

On Delphi: Visit the GameSIG, under the Groups and Clubs menu. On GEnie: Stop by the Games RoundTable (type: Scorpia to reach the Games RT). On The Source: Send SMAIL to ST1030. By US Mail (remember to enclose a self-addressed, stamped envelope with your questions): Scorpia, PO BOX 338, Gracie Station, NY NY 10028.

Until next time, happy adventuring!



Offensive and Defensive Tactics in Mech Brigade

by Roger E. Bohn



Roger Bohn teaches operations management and is currently working on a project utilizing Final Frontier's Space M+A+X *as a case study for operations management in a Research and Development environment. In this issue, he offers a statistical analysis of tactics for* Mech Brigade *and by happy coincidence, for* Kampfgruppe, *its predecessor.*

Mech Brigade, like *Kampfgruppe*, has virtually everything in a tactical land wargame: hidden movement, ammunition, indirect fire spotting, delayed movement, command and control, unit facing, and sophisticated formulas for determining unit effectiveness. Unlike many computer wargames, the documentation of Mech Brigade gives us information about these formulas. It describes precisely the algorithms used for calculating the effects of fire. These involve matters such as: range, armor thickness, smoke, movement of the firing and targeted units, and whether the firing unit has had time to range the target. Nonetheless, figuring out the implications of the rules and algorithms is a challenge. I resorted to a Lotus 1-2-3 spreadsheet to figure out the effects of different variables on kill probabilities. Some of the results were surprising. Therefore, I have isolated a set of useful tactics from those results and the documentation in general.

I will discuss the firing algorithms first, beginning with direct fire against armored targets. Then I will show how to modify the analysis and conclusions for anti tank guided missiles (ATGMs) and infantry. In the second half of the article I will discuss some useful tactics growing out of the analysis. I originally intended to provide tips on playing the computer opponents, but have decided not to spoil your fun by telling you its weak points.

Part 1: The Basic Formulas for Firing

The probability of scoring a kill when one unit fires at another separates into two components. One depends on the range, muzzle velocity of the firing weapon, and armor thickness of the target. A good rule of thumb is that it will be, at most, 1.3 units destroyed per pulse of firing, depending on circumstances. The other component is a set of factors which are independent of the range, and simply multiply each other. Since this component is much more straightforward, I will start with it.

Range Independent Factors: Terrain and other adjustments

If the firing unit and the target are stopped and in clear terrain with nothing between them, then the second (range dependent) component is the only one which matters. However a variety of other factors, such as cover terrain, can further reduce the effectiveness of fire. These factors simply multiply the range component, which greatly simplifies calculations. They are:

a) Number of firing units: All units in a platoon are considered to be identical and the effect of a platoon's fire is multiplied by the number of units in the platoon. For example, ten tanks will destroy twice as many units as five tanks given identical circumstances (Since many Soviet platoons have ten tanks, compared with four or five for NATO, this is a major factor!).

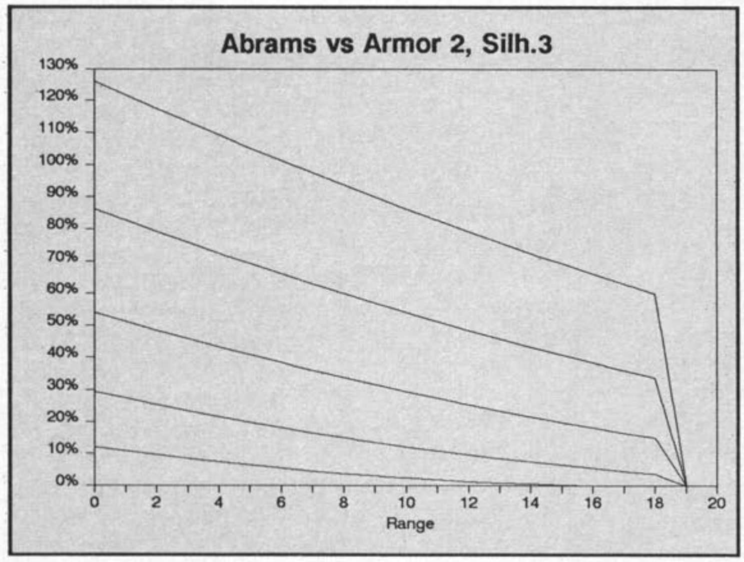
b) Movement: If the firing unit is moving very slowly, divide kill probabilities by two; at 10, divide by three; and at 20, divide by four. The same adjustments apply if the target vehicle is firing and all of these adjustments are cumulative. Thus, if one unit moving at 20 fires at another unit moving at the same speed, the effectiveness of the fire is reduced sixteenfold. Even at close range and with overwhelming fire power, therefore, you could only expect to knock out about .1 vehicles per pulse of firing. (1.3 divided by 16.)

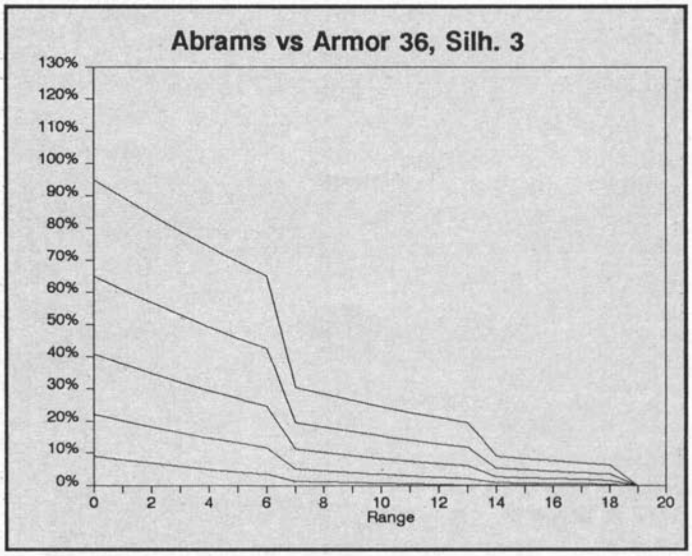
c) Terrain: If the target is in protective terrain (woods, town, or entrenchment) and stopped, divide by three. If there are two blocking points *between* the firing unit and the target (e.g. a woods square), divide by two. For four blocking points-, divide by three.

d) Silhouette: The kill probabilities are proportional to the silhouette of the target. Thus an Abrams (silhouette 4) will be about 1.33 times more vulnerable than a T-80 (silhouette 3) under identical circumstances.

Range Dependent Factors: Range, armor, and weapon

This component is based on the range, the number of pulses fired, the adjusted maximum penetration, the armor strength, and nothing





else. These relationships are quite complex and, therefore, I have graphed them. The graphs will be presented and discussed later.

Under the best possible circumstances (e.g. range of zero and a tank firing for several pulses at a lightly armored vehicle), the maximum kill probability is about 130 percent per firing vehicle, per pulse of firing. (The 1.3 is for a target with silhouette 3. It is about 1.7 for silhouette 4, such as an Abrams tank, and about .8 for silhouette 2.) For example, a weakened platoon of two tanks would destroy about 2.5 APCs per pulse of firing. A platoon of more powerful tanks would not change this. Presumably this reflects the idea that under optimal circumstances the probability of a hit is 100%, and with a powerful enough weapon one hit will destroy the target. The maximum of 130 percent instead of 100 percent is a minor anomaly.

Interpreting the graphs: Although 1.3 is the upper boundary, things go downhill from there. Armor thickness, weapon MP (maximum penetration), and range all interact nonlinearly. The graphs presented in this article are based on an analysis using *Lotus 1-2-3* to graph the kill probabilities for different combinations. Each graph shows the kill probability (more precisely, the expected number of kills per pulse fired), for one unit, in clear terrain wiith both target and firing unit halted. For example, graph #1 shows a heavy tank (M60, Abrams, Leopard2, T-72 or T-80) against any moderately armored target such as an APC, or even the rear armor of most tanks. This is the simplest case, because the APF (penetration factor, adjusted for range and armor) is always exactly equal to 2. The top line shows the results when 4 pulses have been fired. Let's start with that. At close range the maximum probability is 125 percent. This falls to 75 percent at maximum range. The next line shows 3 pulses of firing. The bottom line shows 1 or zero pulses fired, i.e. the kill probabilities for the first pulse of firing. The distance between the lines is determined by the ACCuracy rating of the firing unit; units with high accuracy (e.g. tanks) are much better after 4 pulses than when they start firing. The downward slope of each line reflects the effects of RANGE. Now, let's look at graph #2, for an Abrams firing at the front armor of a T-80. Here the maximum penetration is 48 and the armor is 36. These are within a factor of two of each other. Hence the APF is less than 2, and the graph looks radically different than graph #1. The maximum effectiveness of fire is only 100%, and that is only reached on the fourth pulse. Furthermore, fire at a range above 6 (one third of the Abrams' maximum range) is much less effective, and beyond range 14 is almost useless. Most graphs of direct fire weapons against armor will fall into one of these two patterns. As long as the maximum penetration (MP) is more than about 2.5 times the armor, graph #1 is the one to use In fact as long as you scale it to the maximum range of the firing unit, graph #1 is almost precisely correct.

ATGM Adjustments

All of the above apply also to ATGM weapons fired at vehicles, except that:

a) The maximum kill probability for a single firing unit is about 30% instead of 1.3.

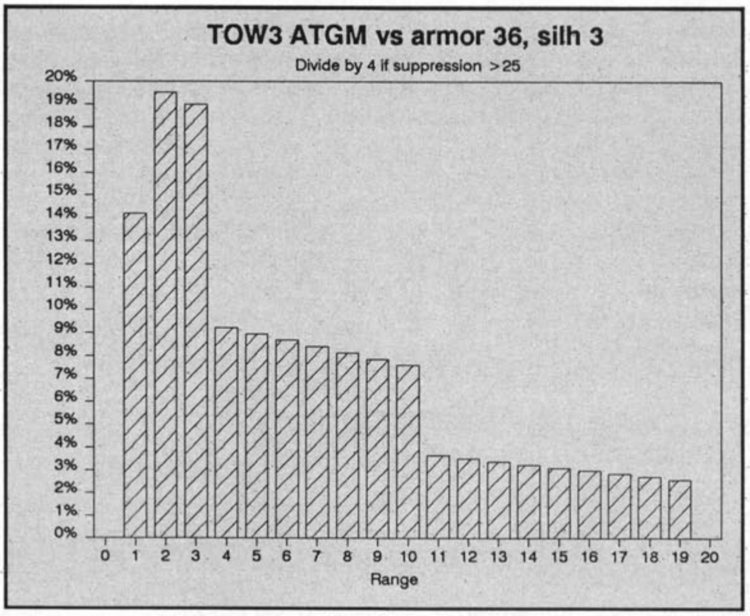
b) Movement of the target does not reduce the kill probabilities. Movement of the firing vehicle still does.

c) If the unit firing the ATGM is suppressed greater than 25 (which is quite often the case) divide by four. The latter two changes have a lot of implications for the best ways to attack with and defend against ATGMs, which I will discuss in the second half of this note.

Infantry

The rules for fire at infantry are

rather different, and very situation specific. Basically, infantry in protected terrain is extremely hard to knock out or even to suppress. Moving infantry in open terrain is very vulnerable. Infantry suppressed to level 200 is also very vulnerable, regardless of where it is.



Part 2: Tactics

Now that we understand what factors determine the effectiveness of firing, we can look at some tactics for causing as much damage as possible, while minimizing the damage to us.

Managing Ammunition

One of the features of the game is that it tracks ammunition levels of each unit on the board. Most units have 40 pulses of ammunition. Depending on the scenario, running out of ammunition can be a big factor near the end. This is especially true for main tanks near the end of assault scenarios, which last 20 turns. It is possible to manage one's own ammunition by not firing in situations where it will have very low effectiveness (see below). Pull back units when their ammunition level gets low. This enables commanders to entice enemy units into wasting ammunition by giving them a lot of unattractive targets, such as infantry in reinforced squares, rapidly moving units, and units which are only visible for a few pulses, then hide (Note: To make infantry visible, have it fire at anything.).

Do not, therefore, waste fire. Since firing when you are moving or when the target is moving reduces effectiveness, makes your units visible, and wastes ammunition, such actions should be avoided. Other examples of situations with low effectiveness include: a) firing for only a few pulses, especially for weapons with high ACCuracy rating; b) firing at long range (in some cases; see the graphs); and c) firing through heavy smoke or trees. Sometimes, however, these will be unavoidable. In fact, there are cases where they are desirable. When enemy units are closing rapidly, you can select targets and fire a few pulses at them. Then, when they stop, you will already be on the top line of the graphs where your fire is much more effective.

Pitfalls of Automatic Target Selection

In between turns, your units will select targets automatically if their present target is destroyed. There are some predictable patterns in this which you can exploit, especially when playing a computer opponent. Once selected, a unit will stick with a target unless you manually assign another target. If you do make a manual assignment, you lose the pulses of firing accumulated so far. Closer units will be selected first. Hence, you can use unimportant units as "cannon fodder" while other units approach. With luck, you can keep them moving and pull them out before they are destroyed. The unit in the "top" of a stack will be selected first. (It appears that position in the stack depends on the unit ID number. For example B2, B3, C0, C2, E0. This is unfortunate, since it means that several of your units may all target a single enemy unit. When that hapless unit is destroyed, as will quickly happen, all of your units have to start over from zero pulses at once. Furthermore, other enemy units in the stack will not have received any suppressing fire. Therefore, when assigning targets manually, generally avoid the top unit in a stack and spread fire among the available choices. (All too often, the enemy seems to have five or six T-80 platoons of ten tanks each in one target stack.) As units destroy their assigned target, they will pick out the top unit. The decision to switch targets for one of your units is an important one. Examine the graphs and the ACCuracy rating to see how much you will give up. ATGMs lose nothing when they switch targets (unless the target is at their minimum range), but for tanks the effect is dramatic. On the other hand it is usually pointless to let a weak unit flail away at the front armor of a tank. At least, if it holds its fire, it may not be spotted.

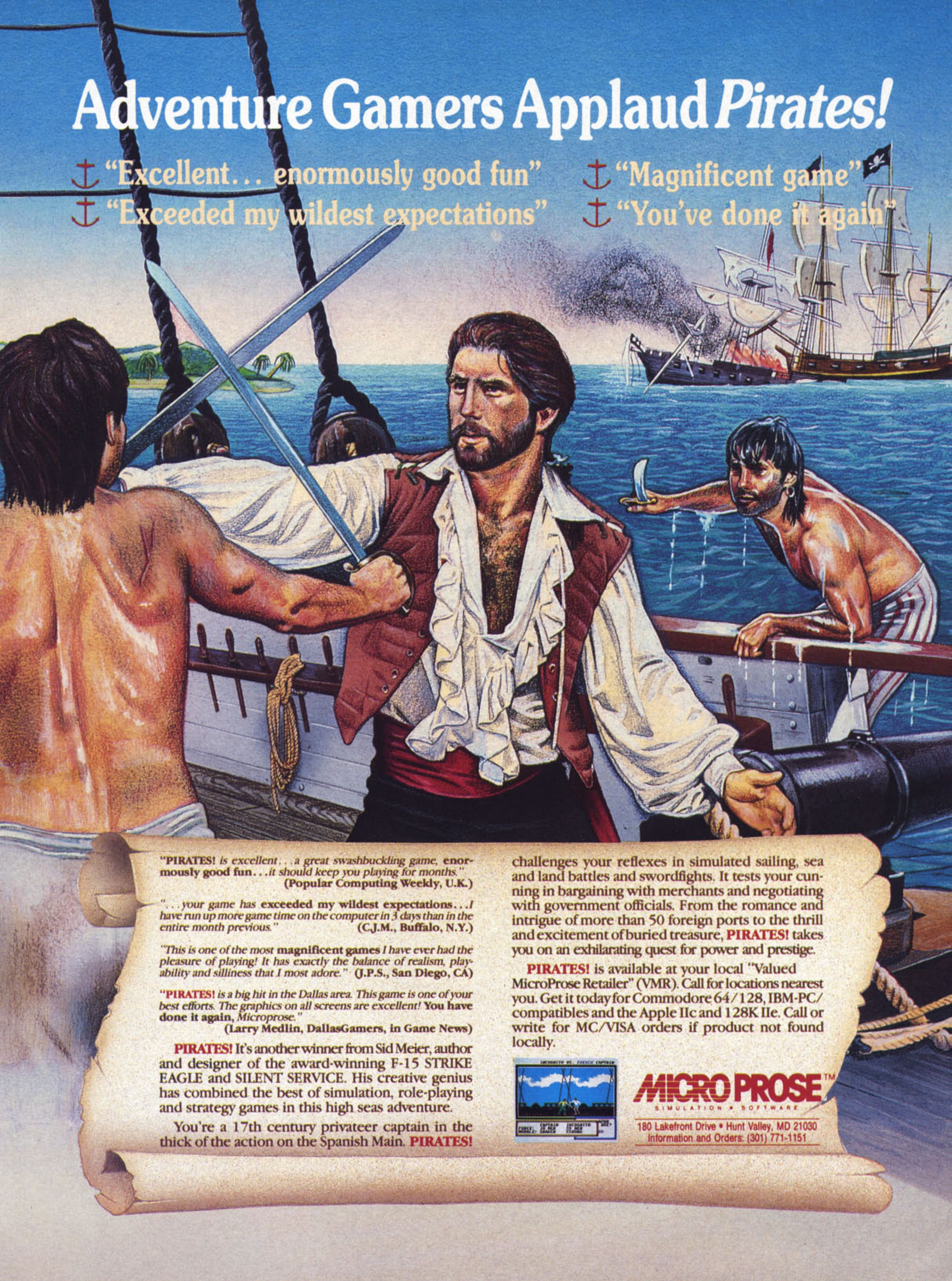
Targeting Priority

Usually, each of your units will have several possible targets. In making these choices, the first priority is to target the units causing you the most trouble. Second, keep firing at same unit. Third, fire from sides or rear to maximize armor penetration. Fourth, a penetration MP number which is three times greater than the armor value of the target will almost always be successful. Finally, fire at moving units only if you expect it to stop.

Optimal Use of and Avoidance of ATGMs

a) When being fired on by ATGMs, try to shoot at each ATGM unit with a minimum of one of your units, even if you have no chance of

(Continued on page 38)



Adventure Gamers Applaud *Pirates!*
"Excellent… enormously good fun"
"Exceeded my wildest expectations"
"Magnificent game"
"You've done it again"
"**PIRATES!** *is excellent…a great swashbuckling game,* **enormously good fun…** *it should keep you playing for months."* **(Popular Computing Weekly, U.K.)**
"…your game has **exceeded my wildest expectations…** *I have run up more game time on the computer in 3 days than in the entire month previous."* **(C.J.M., Buffalo, N.Y.)**
"This is one of the most **magnificent games** *I have ever had the pleasure of playing! It has exactly the balance of realism, playability and silliness that I most adore."* **(J.P.S., San Diego, CA)**
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Sneak Preview:

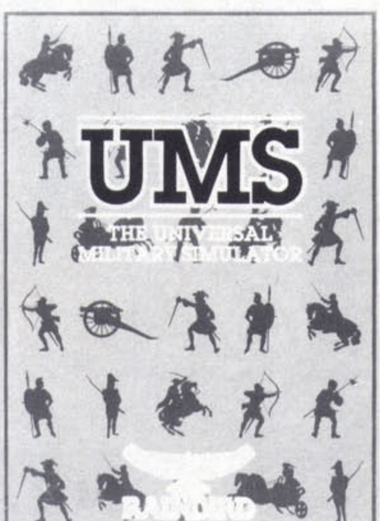
The Universal Military Simulator

One's first impression of *UMS* is that of awe. The computer generated topographical battlefields, the highly playable nature of the game, and the very flexible nature of the construction set come together to give us the impression that UMS is definitely a breakthrough product. However . . .

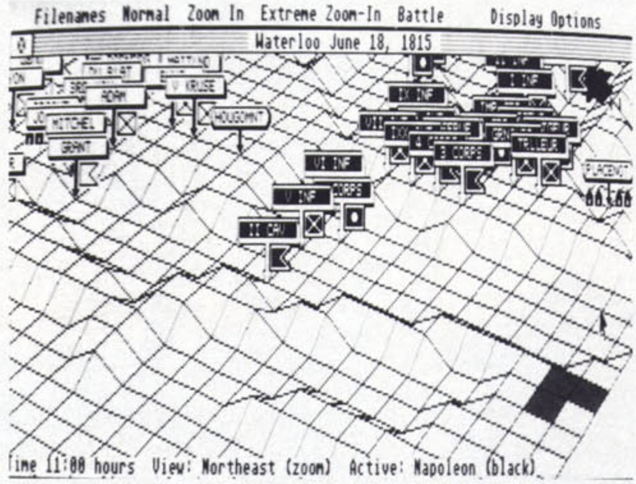
This initial sneak preview is being written literally at the 11th hour of production on this issue *[Ed.: Actually it was written at 6am on the day we went to press]*.

Name:	Universal Military Simulator
Systems:	Atari ST, IBM (soon)
Designer:	D. Ezra Sidran
Publisher:	Firebird Licencees Ramsey, NJ

In the past three days the phone lines between the CGW offices and Ezra Sidran (designer of UMS) have been humming. When the "final production" copy of UMS arrived less than a week ago we were simultaneously elated and frustrated. Elated, because this is an "awesome" product. Frustrated, because there were some serious problems in the execution of the program. Most of these have been cleared up in the past three days and the version we have just received seems to have successfully addressed the problems we saw. We feel we must mention those problems here since the very earliest copies of the Atari ST programs still have these problems. To summarize them: the retreat rules did not work properly; moving across hilltop squares caused movement penalties even if the "intersections" were of uniform elevation, such as terrain on top of a mesa; artillery had no line-of-sight restrictions (O.K. for WWII and modern scenarios, but unrealistic in earlier periods); and units that lost an initial round of battle were almost always eliminated before players could regain control of the units and retreat them.

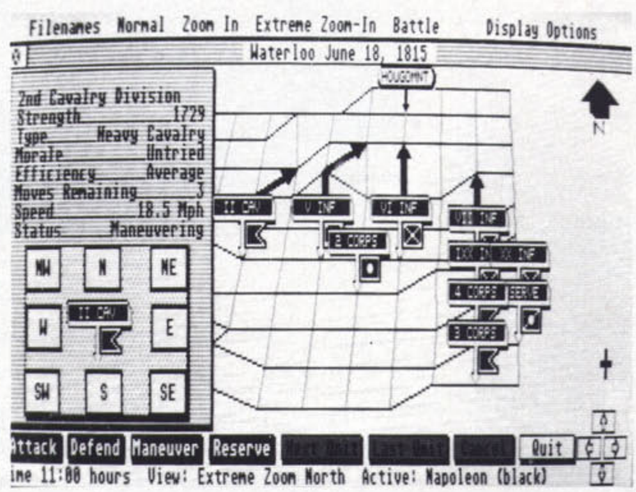


To determine if you have one of the early copies of the game, try moving a unit on a hill to another map point on the same hill (i.e. no change in elevation). If the computer accesses a movement penalty for "hilly terrain," you have the defective version. A replacement copy of the game can be obtained from Firebird. Call them at 201-444-5700 for information. *Note: the problem only exists on the early copies of the Atari ST version. The IBM version has all the corrections.*



Second Corps Preparing to Assault Hougomont

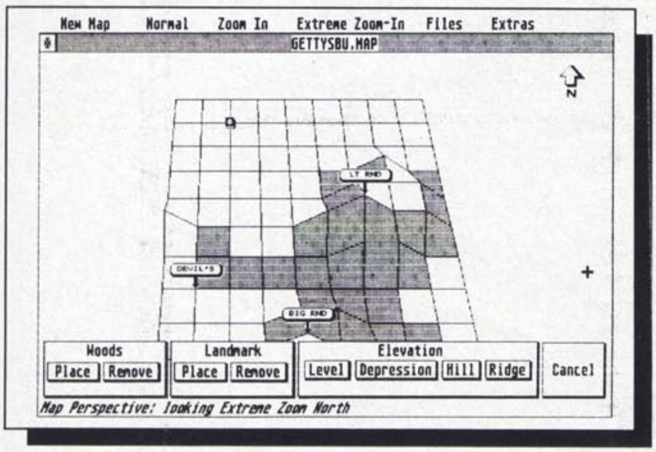
Now that we have dealt with the problems in the early ST copies, we want to say that this is a cutting edge product that all computer wargamers will want to play. First of all, the three-dimensional topographical views of the battlefield offer a unique perspective in computer gaming. The ability to look at the entire map from eight different compass points is, to our knowledge, unique. Further, player-commanders may either observe the entire bat-



Second Corps' Tactical Assault on Hougomont

tlefield from one of these compass points or zoom in on critical portions of the map. This may be done by means of easily accessible pull-down menus. Also, moving units across the screen in UMS is akin to moving miniatures across a table-top of lavishly constructed terrain. It may not be as colorful, but neither is it as expensive and the commander's viewpoint is quite similar.

Second, the use of "click and drag" movement and targeting speeds the game considerably over some earlier command structures. Players do not have to worry about remembering what they ordered each unit to do, since the program draws an arrow for each unit's intended route. Some players may be suspicious that the program allows unrealistic criss-crossing of units over each other when they

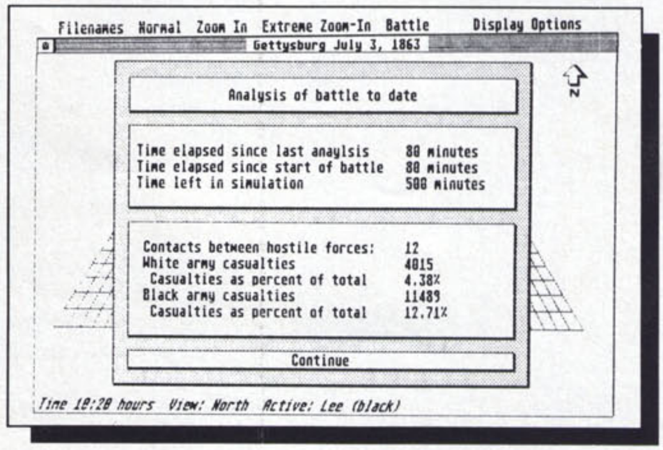


A Portion of the Topographical Map of Gettysburg

see these arrows. The computer acts as a traffic director, however, and does not allow illegal stacking or logistically impossible movement to occur.

Third, the fact that commanders order their units toward objectives and only enter instructions for approximately every hour and a half of simulated time makes the game a legitimate command study, especially for periods earlier than this century. The frustrations of command control are certainly there and that is part of the appeal of the game. Fourth, miniatures gamers will appreciate the program's inclusion of elements such as terrain, elevation, weaponry, morale, status (defending, attacking, maneuvering, or held in reserve), and unit efficiency in its combat calculations. Both miniatures and board wargamers will appreciate the fact that the program allows the player to view the computer's battle logic and observe how it calculates the battle's resolution. Viewing the logic is optional, however, and those who want a "limited intelligence" approach do not have to access this information.

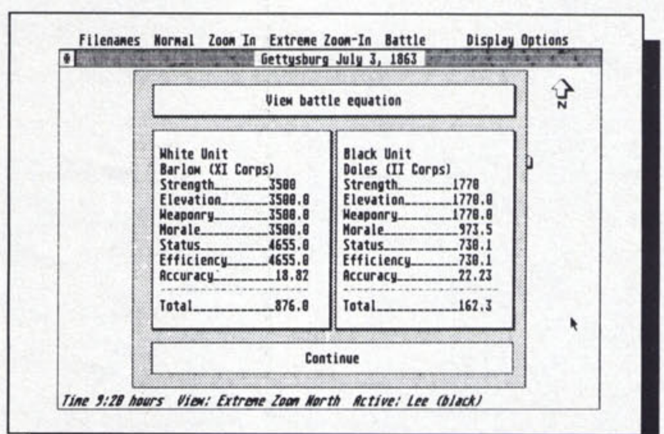
Finally, the program's constructability allows for tremendous flexibility. Not only can players design



UMS's Analysis of Battle Screen

their own maps, orders of battles, and objectives, but players who feel that certain units are too strong, too fast, or too experienced can adjust those with the powerful editor. If players think the artillery has too large a melee factor, they can adjust the melee factor downward. Further, the editor includes six "wild cards" in which the player can design one's own weaponry.

With the "wild cards," as well as the light infantry, heavy infantry, light cavalry, heavy cavalry, archers, elephants, chariots, knights, catapults, pikemen, field artillery, horse artillery, headquarters units, armor, armored cavalry, airborne units, and assault units , the program truly does allow almost any historical, fantasy, or science-fiction battle to be recreated.



UMS's Battle Equation Screen

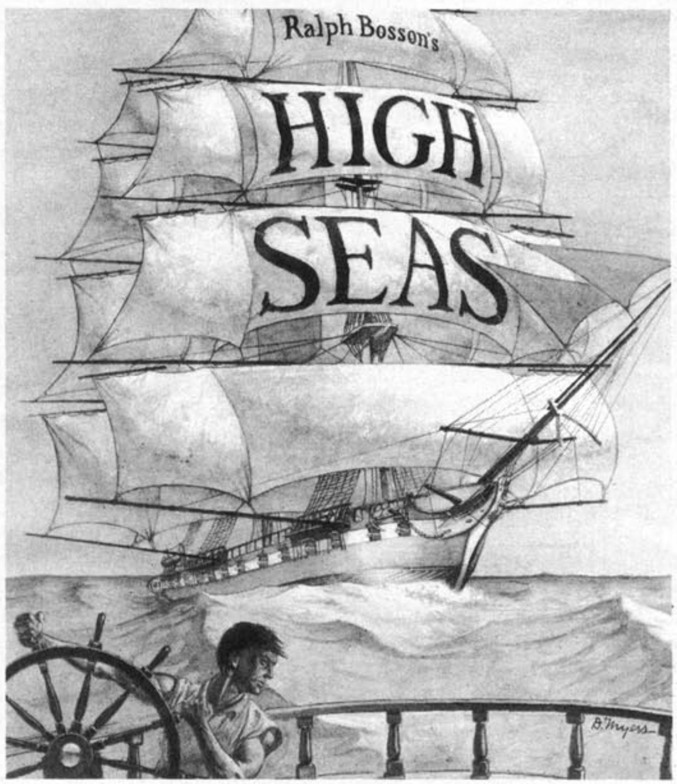
This product should generate lots of excitement. CGW plans to publish a major review, a designer's article, a comparison of UMS with **SSI**'s *Wargame Construction Set*, and various scenario articles in future issues.



Name:	High Seas
System:	Apple w/64K, C-64
# of Players:	1-2
Price:	$49.95
Designer:	Ralph Bosson
Publisher:	Garde Madison, CT 06443

Charting the Course of Garde's High Seas

by Bob Proctor



High Seas is a game about the Age of Fighting Sail. It's not the only one; **SSI**'s *Broadsides* and **Avalon Hill**'s *Clear For Action* have been around for awhile and **Broderbund** has just released *The Ancient Art of War at Sea* (though only for IBM at the moment). *[Ed.: It is also worth noting that Avalon Hill is expected to release a computer version of "Wooden Ships and Iron Men" in 1988.]* High Seas emphasizes the period 1750 to 1810 or, roughly, from the Seven Year's War to the War of 1812. It is possible to recreate both the single ship duels fought by the young U.S. Navy as well as the larger battles fought between the British and the French during the Napoleonic period. The game slows down considerably as more ships are added, however, so there is a "patience limit" that dictates how big a battle you will want to play. You can save games to disk, though, so you don't have to finish it all in one sitting.

Of all the games on the topic, High Seas is the most flexible. You can play either side against the computer or another player. You can control all of the ships on your side or concentrate on commanding one or two while the computer handles the rest. You can even have fun chasing and capturing merchant ships and eluding (or sinking) their escorts.

Sextant Sighting (The Game System)

High Seas can be played with either turns or continuous action. In solitaire mode, continuous action is better; you interrupt play only when you need to give or change an order. When playing with a friend, however, you may find it works better to have an automatic order phase every 10 minutes of game time. You can plot your ship's moves out ahead or else give general orders to pursue or evade the enemy and allow the computer to take care of the details. Some actions, like adding or reducing sail or reloading guns, take time and keep the crew busy so that further activities must wait. In battle, you can use conditional orders like "don't fire until you get within 200 yards" (or whatever distance you choose) or hold fire completely (in which case your officers ask you if you'd consider changing your mind whenever a tempting target presents itself).

There are three viewing modes in High Seas. Chart view shows you the entire playing area (usually 21 miles square but it can be smaller) and is used to find out where you are in relation to land or enemy ships. The second view—Map screen, also shows you a view from above, but in more detail. You see your ship and any others within a couple thousand yards or so, long range for the cannon of the period. You can tell which way ships are moving relative to the wind and it is in this mode that you plan your moves.

Finally, Battle view is what you would see from the deck of a ship. This view is used for selecting targets and viewing the results of combat. In Battle view, there are "blind spots" where a ship approaching you will not show up on either the side or rear view until it is quite close. Also, all ships look alike whether they are 28-gun single deckers or 110-gun triple deckers, but there is a big thrill in seeing your enemy minus a mainmast after a heavy broadside! Battle view has the potential to really make you feel a part of the action and I was tempted to play an entire game in this mode for realism's sake. Alas, the game reverts to the Map screen automatically for orders.

Orders are given using pull-down menus and sub-menus that are reasonably similar to those used on Mac, GEOS, or Apple IIGS software but there does not appear to be any support for mice. You will probably find the keyboard superior to a joystick for precise control, but there is no accounting for taste, so choose whichever you like. Some options are less than intuitive the GET A SCENARIO command is hiding on

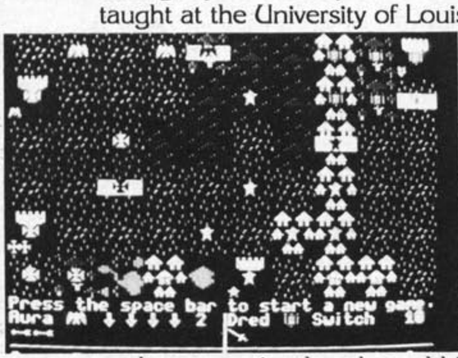
(Continued on page 34)

DARKHORN OF PLENTY

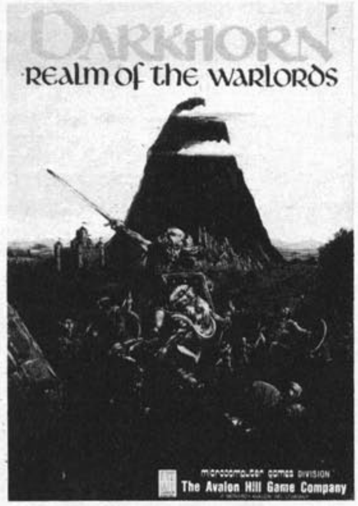
by Johnny L. Wilson

D*arkhorn* is a real-time, multi-player fantasy wargame with almost unlimited potential for quick gaming sessions or all night campaigns. Once again, the name Tom Cleaver is associated with an extremely playable multi-player game. Please allow the writer some brief reminiscences. I remember sitting in a semi-circle with six other players around a 48K Apple II console in the basement of the New Albany Indiana Public Library back in 1978. Armed with graph paper in hand and anxiously awaiting my chance at the keyboard, we enthusiastically played the predecessor of *Galaxy*, Tom Cleaver's first published computer game (Avalon Hill), and my very first computer gaming experience. On another occasion (a couple of years later) I remember the light in Russell Sipe's eyes as Tom offered a guest lecture on computer gaming during Sipe's "History of Gaming" class which he taught at the University of Louisville's "Free University." That light may have been the spark that eventually birthed *CGW*. Then, as recently as a year ago, I remember the night that four CGW staffers gathered, amidst tens of thousands of dollars of computer games, and once again played an old favorite, Galaxy!

TITLE:	Darkhorn
SYSTEMS:	Apple, C-64
# PLAYERS:	1-4
PRICE:	$30.00
DESIGNER;	Tom Cleaver
PUBLISHER:	Avalon Hill Baltimore, MD



Yes, this really does make a difference to the review. The first two reminiscences remind us that Tom has never been satisfied with games which are only for *one* person and it is his desire to spread the joy of computer gaming to as many as possible. He has constantly sought to have human-to-human interaction refereed by the computer rather than settling for the standard (primarily solitaire) designs. In Galaxy, there is considerable waiting to input one's orders. In Darkhorn, up to four players can input their orders simultaneously, using a combination of paddles, joysticks, and/or keyboard. Galaxy stretched the limits of the Apple sound box to make terrific alarm and laser sound effects. Darkhorn goes even further by using the melodic themes from Wagner's "Ride of the Valkyrie" and Beethoven's "Ode to Joy," among others to indicate combat results. Galaxy has a short learning curve and doesn't have to be a long game. The same is true of Darkhorn. Galaxy was open-ended because of the random map capability. Darkhorn comes equipped with 16 pre-generated maps and the random map generator, too. Galaxy forces players to consider their resources as a significant portion of their strategy and this is even more critical in Darkhorn. In short, Darkhorn is vintage Cleaver and more playable than ever.



Both Auras In The Water

The fiction of Darkhorn revolves around a cataclysmic battle (or series of battles) between four major races. A la Tolkien, these races are Dwarves (Grum), Elves (Aura), Humans (Balt), and Changelings (Dred). All have their advantages listed in the documentation, except for the Changelings. It appears that this race has the characteristics of the other three in a random fashion and all the recruiting bonuses, but this is not certain.

Players who do not like the representative names given to the races may change them to their own or their enemies [Ed.: how about ex-girlfriends?]. Dwarves have a combat advantage over elves, but are weaker than men. They receive a combat bonus of ten points when they are in hilly terrain. Elves have an advantage over men due to magic, but have difficulty with dwarves due to the latter's magical resistance. They receive a terrain bonus in woods areas. Men easily defeat dwarves, but need to avoid elven magic. As social animals, men receive the terrain bonus in towns. All races receive a five point combat bonus for each friendly fort in the area (up to four per area) and for having parties of mixed races (combined arms, as it were). In addition, each elf in the party gets a bonus of two points representing a ranged weapon effect.

Although these bonuses are listed in the documentation, they must be constantly kept in mind by successful players.

When playing with less than four human players, one should note that the computer opponents are extremely proficient at resource management. Since each party earns action points (the resource units) simultaneously, it is advantageous to have as many parties as possible. Computer players practice this reproductive mitosis to maximum efficiency. Human players who tend to think in terms of consolidating parties into large task forces will fare poorly in this game. Furthermore, it is extremely profitable to fortify

one's home quadrant as expeditiously as possible. Those who fail to do this find themselves backed into a "last ditch" defense effort at their home castles.

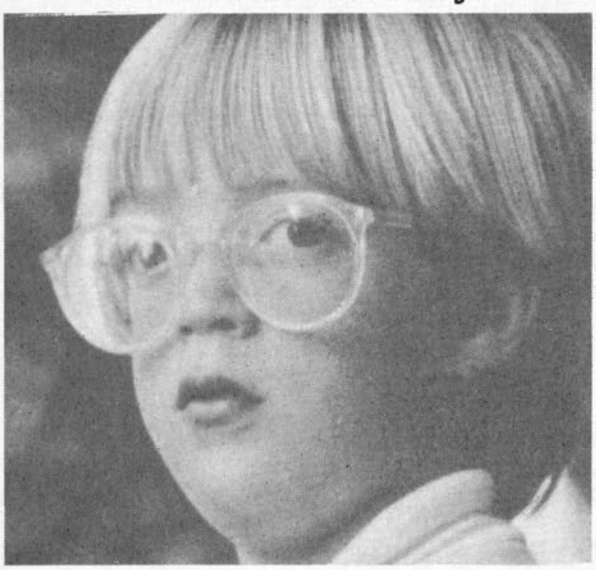
The real-time aspect adds an exceptional dimension to the game. Players find themselves anxiously awaiting the addition of the next action point in order to add a recruit prior to a vital attack and gain numerical advantage or a combined arms bonus. The computer "intelligence" is adept at switching from party to party in order to minimize this wait. Human players must discipline themselves to switch from party to party, even when battle seems imminent. (Note: There is a "pause" command for those unexpected phone calls and the like.)

Dark Hordes to Darklord

Players who tire of fighting one scenario at a time have the option of playing the campaign game. In the campaign game, players conquer eight provinces (maps) in a row in order to face the "Final Trial" against the Darklord. Winners of this final battle/trial hold claim to being the new Darklord.

In summary, Darkhorn is a fast-paced strategy game which is ideal for getting the gang (or the family) together for an evening's entertainment. Challenge, depth, and interest level make this a product to contend with for many years.

Have You Seen This Boy?



This is Alexander Harris (he is the son of an SSI Inc. employee). He was abducted from Whiskey Pete's Hotel and Casino in Nevada on November 27, 1987. Alex is 7 years old, 4'5" tall, weighs 60 lbs. and has missing front teeth, light-brown hair with bangs and brown eyes. He was wearing a red fleece jacket with a black pattern, a turquoise polo shirt, jeans, and white Nike hightop sneakers. He also wears thick glasses.

Witnesses saw him leave with a white male in his mid-30's, approximately 5'8" tall weighing about 175lbs., with glasses and his hair combed forward. The man was wearing a brown windbreaker jacket.

If you've seen Alex, please call your local police department or the Las Vegas Metropolitan Police at 702-799-3591 or 702-386-3213.

High Seas

(Continued from page 31)

the SAVE GAME sub-menu, for example. Once you get used to them, the menus work pretty well. They could be made a bit faster by putting the most used command, CLOSE (which returns you to a higher level menu), at the top instead of the bottom.

Charting a Course (The Manual)

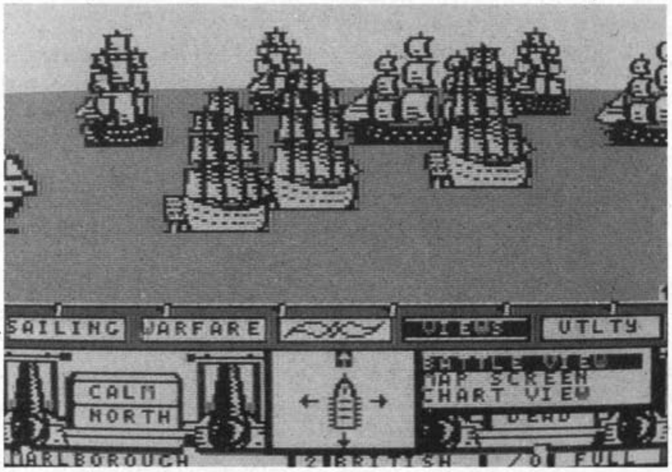
My first impression of the High Seas manual was favorable. It has forty-three pages of text, an index, a glossary, a bibliography, and uses graphics well. So much for first impressions, after reading it and trying to find the answers to subsequent questions, I feel it is woefully incomplete.

The "Tutorial," a page and a half long, is really just a "How to get Started Quickly" piece. You've seen them; "First do this, now do that" and after one turn you are left in the middle of the game knowing a few commands but with only a vague idea of what your other options are or how to use them.

The reference section of the manual goes through the menus in order, explaining each command in detail. This sequence makes no sense as far as playing the game goes. You get scenario editing before anything else and an explanation of the different views doesn't come until page 15. The jumbled order, combined with murky text, will leave you confused and force you to return frequently to the manual with the uncomfortable feeling of having missed something.

In fact, you probably have! Many aspects of the game are not covered at all or are buried away with no index reference. How do you interrupt to give orders when you are playing with continuous execution? (Hold an arrow key down until you see an acknowledgement.) How do you know when guns are reloaded? (You don't without trying to fire them.) What do you do if your ship gets stalled pointing into the wind ("in irons")? (Order a turn in either direction and wait for the ship to drift around.) What do you do if you are "in irons" and also fouled with another ship? (I've never found an answer to this one, the ships foul each other repeatedly and drift forever.)

Indeed, some of the commands themselves are given short shrift.



For example, I quote from the paragraph on the FLAG MANEUVER command, "...COLUMN and LINE are flag ship only orders (See FLAG SHIP CONTROL in the MOVEMENT AND TACTICS chapter...)". Okay so far, but when we turn to that chapter we learn only that the FLAG MANEUVER command "...brings up a standard maneuver sub-menu, but with two new commands added, COLUMN and LINE, which are group formation orders." *This* is an explanation? Even if you are experienced at naval matters and you figure out that LINE means all ships turn at the same time and COLUMN means ships turn one after another at the same place, wouldn't you like to know if there is any delay for FLAG commands or if there is a possibility that a ship will miss a command?

The chapter on MOVEMENT AND TACTICS is helpful as far as it goes. It provides some useful data on ship speed under varying conditions of sail and wind; shows an example of two ships sailing towards each other; and discusses some of the options for each captain. Nevertheless, the whole section on FLAG MANEUVER is inadequate. In several scenarios, ships start in line, bow to stern, and almost any attempt to turn will result in multiple foulings. Some advice on how to avoid this should be included. The term "close hauled" is also misused to mean some form of reduced sail (less sail than Battle Sail which is less than Full Sail). I would suggest either "Reefed" or "Reduced" instead. "Close hauled" means that a ship is sailing as much into the wind as it can. In game terms, that means 45 degrees off the wind.

Opening Dispatches (The Scenarios)

In the back of the manual are descriptions of the 11 scenarios that come with High Seas. These are stored on a separate disk so that game and scenarios can be available at the same time (if you have two disk drives). They are:

1. Constellation (44 guns) vs. Insurgente (38 guns) Date: 2/9/1799
2. Constellation (44) vs. Vengeance (52) 2/1/1800
3. Constitution (44) vs. Guerriere (38) 8/19/1812
4. Constitution (44) vs. Java (47) 12/29/1812
5. United States (44) vs. Macedonian (38) 10/25/1812
6. Chesapeake (44) vs. Leopard (44) 6/22/1807
7. Battle of Lissa c.1811 (4 British vs. 6 French & Italian)
8. Battle of Cape Verde (modified) c.1780 (5 British vs. 5 French)
9. Raid on Merchantmen (hypothetical) c.1800 (1 French vs. 2 British and convoy of 4)
10. Convoy Intercept (hypothetical) c.1690 (4 British vs. 3 Dutch and convoy)
11. Battle of Ushant c.1795 (8 British vs. 7 French)

(Continued on page 36)

"FEEL LIKE CHALLENGING A 3-TIME WORLD CHAMPION?"



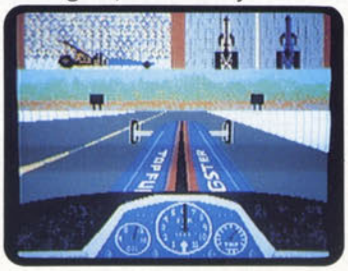
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High Seas

(Continued from page 34)

The first six scenarios take an average of 15-20 minutes each, depending on how aggressive you are. (Hint: being aggressive does *not* improve your chances of winning, it merely forces a quick conclusion.) The multi-ship scenarios, 6 through 11, take much longer, say a couple of hours. Scenario 9 is not too bad, but number 11, with 15 ships, including 100-gunners on both sides, can take all day. It is easy to modify these scenarios, changing the crew size or quality or adding damage to a ship, and you can also design your own scenarios from scratch.

The Gazette (Conclusions)

The two new games on the topic easily outclass the older titles. High Seas will inevitably be compared with "The Ancient Art of War at Sea" and I prefer High Seas for fighting the frigate duels typical of the War of 1812.

When it's one ship against one ship, you are concerned with adding and reducing sail, playing for the weather gauge (wind advantage), loading different kinds of shot and maneuvering for a rake. High Seas does this better than any other game I've seen. "Ancient Art" may have better animation for boarding but it is no more realistic. Besides, grappling and boarding is a last gamble for a ship which has lost other advantages.

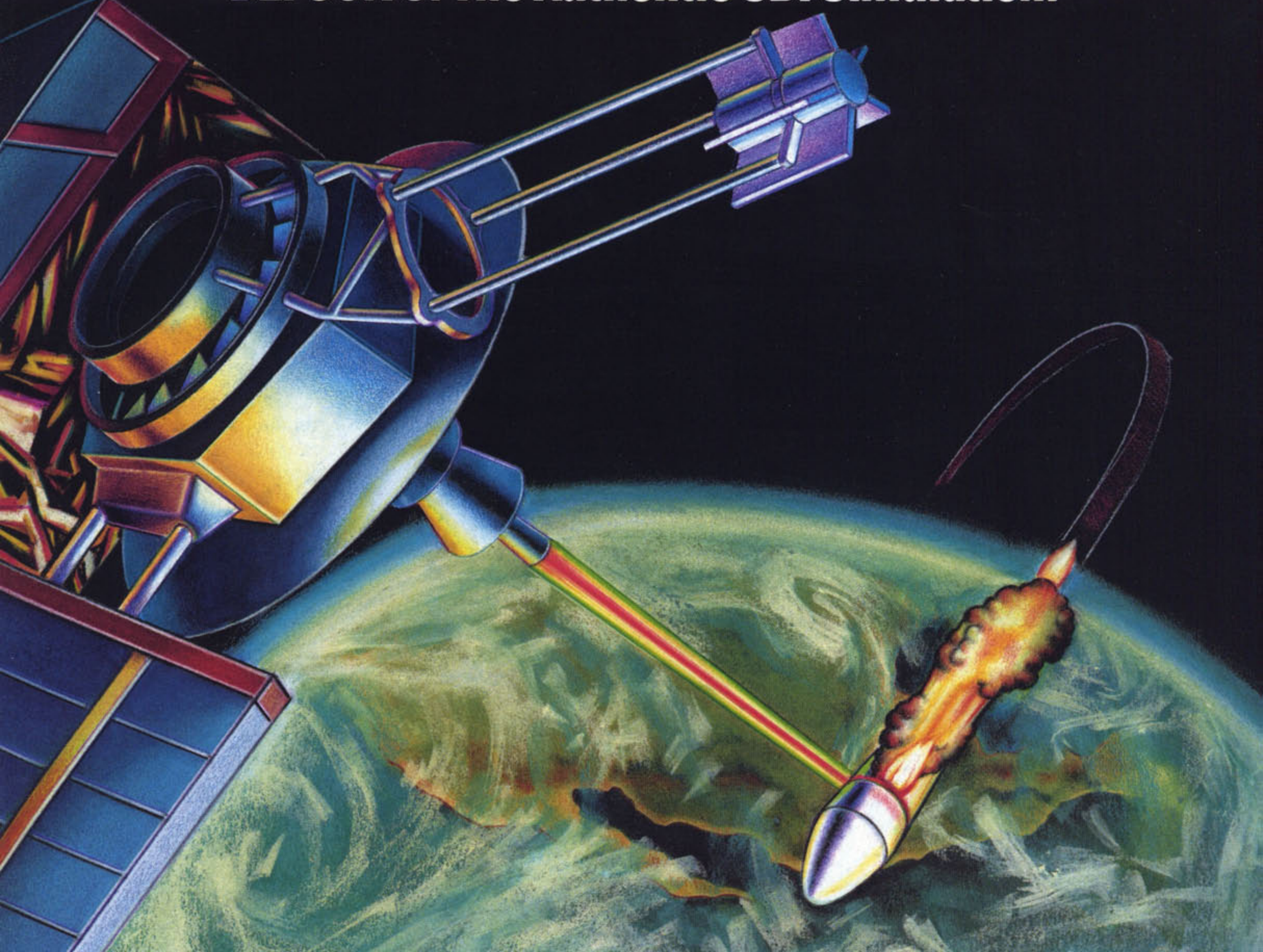
For fleet actions, however, High Seas is not so hot. It is so slow that an accelerator card is almost mandatory (for Apples anyway). Having 128K does not help this much since we're not waiting on the disk drive.

There are also bugs that surface in multiple ship melees. One is that you can fire at targets that are completely hidden behind other ships without damaging the ship in front. This is good when the nearer ship is on your side, frustrating when it is an enemy, and unreal ALL the time. When you select such a target, it gets redrawn on screen in FRONT of the nearer target. Another problem was that, from time to time, one of my ships would turn right when ordered to turn left. A few turns later everything would be all right again. Neither of these "bugs" appears at all if you are playing one ship against one ship.

The overall design and flexibility of High Seas are excellent. The level of simulation and the graphics are satisfactory, but the problems with the manual and the glitches during multi-ship actions prevent me from giving it a hearty recommendation.

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Mech Brigade

(Continued from page 26)

knocking it out. Chances are you can raise its suppression above 25 and cut its effectiveness to a relatively low level (Kill probabilities divided by four.). Keep it suppressed and wait for it to run out of missiles. (ATGM carriers have 16 missiles, but units such as APCs only have 4.)

b) When you are firing ATGMs, use them against moving targets, since unlike normal weapons, movement of the target does not reduce their effectiveness. Note also that range does matter (see the graphs), so in most situations set range at less than the maximum. Remember that your unit will probably not be spotted until it fires (unless it is moving). Try to fire, though, before the targets reach your minimum range (either one or three squares) since effectiveness is reduced at minimum range and eliminated entirely at less than that. The most logical way to avoid being suppressed by counter fire is to use your ATGMs after enemy units have already selected other targets. Sometimes, they can be pulled back out of sight so their adversaries lose the accuracy effects of accumulated pulses (ATGMs do not increase their accuracy as they fire more at one target, so you lose only one pulse of effective fire when you do this).

Use of and Avoidance of Helicopters

Helicopters are effective for a variety of missions, as discussed in the Strategy Notes of the rules. The only weapons which counter them effectively are the self propelled SAM systems and the British Rapier, which have long range, high accuracy, and high destructive power. However, each SAM unit carries only 4 missiles and if these are wasted, helicopter units will be essentially untouchable (The shoulder SAMs and self-propelled flak units such as the infamous Sergeant York are better than nothing, but can be neutralized easily.). A good tactic for the owner of helicopters is, therefore, to keep them constantly in motion until all SAMs have been located. While you are moving, SAM fire effectiveness is low. Equally important, enemy SAM units may get off one or two shots, at low accuracy, and then have you move out of range. The remaining missiles will probably not be a problem when you reappear. Once SAMs are located, you can stay away from them, devote a few tanks or artillery barrages to knocking them out, or concentrate your helicopter units to destroy them.

As a defender against helicopters, you should grit your teeth and set your SAM target selection range to a very low number. Keep your SAMs under cover and stationary enough to reduce the chance of being spotted. In this way, you can force your opponent to remain cautious in his use of helicopters. Eventually, he may stop them within your range, and you can then attack (Do not waste missiles firing at moving helicopters, unless you are desperate and want to suppress them temporarily.). If he keeps them moving, they will be less effective.

Use of and Avoidance of Infantry

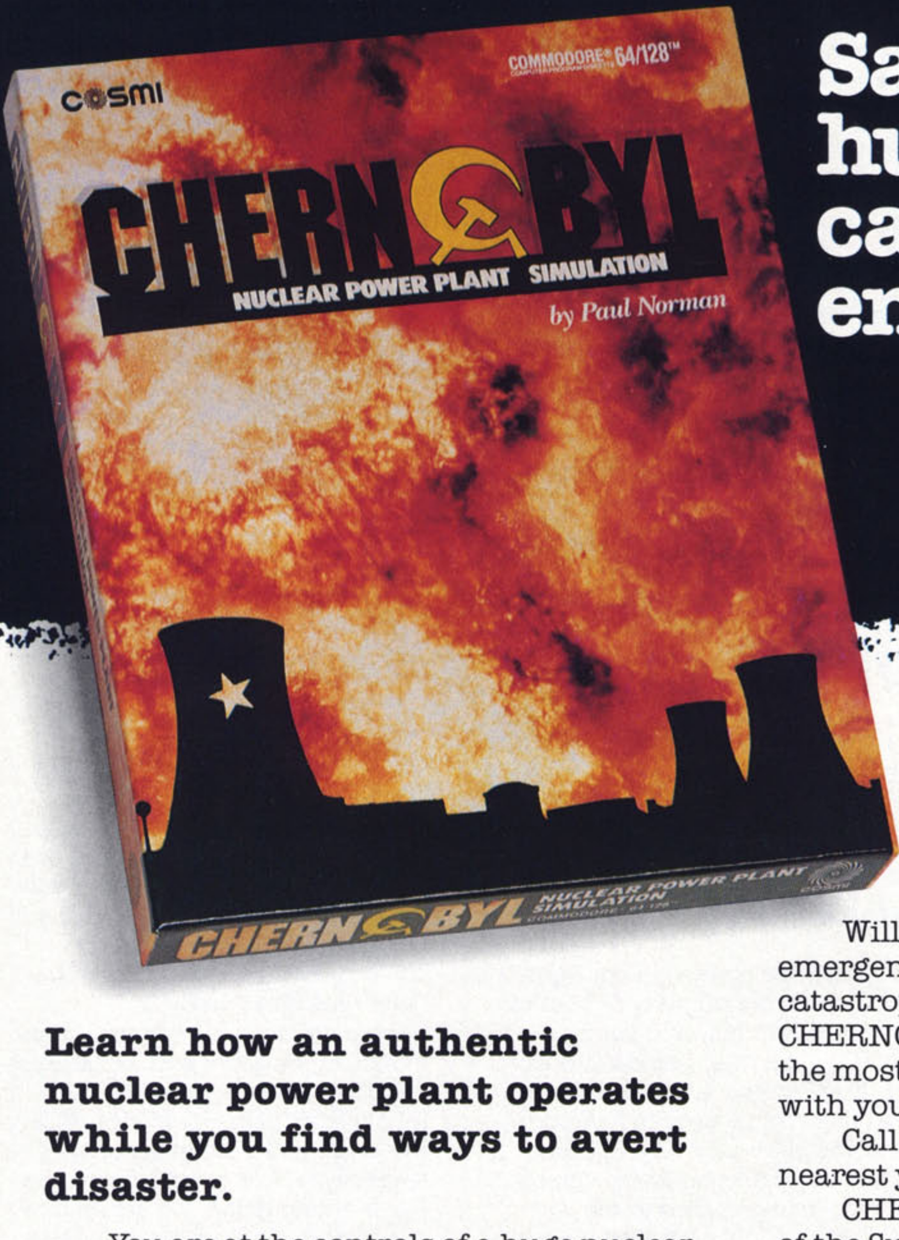
Infantry's most potent weapon is its LAW's, which have a range of zero. Therefore, infantry used well can be extremely effective, while used poorly the same unit can be wiped out with impunity. I once lost two platoons of Abrams tanks to a single platoon of infantry! As a user of infantry, the goal is to get friendly infantry units into a square with protected terrain which also has enemy armor in it. This accomplished, one can probably destroy the armor with ease. It is greatly preferable to have already accumulated several pulses of firing at the armored unit, using small arms. This will make the first shots of your LAWs more effective. As the defender, you can do this by luring the attacker into an adjacent square with protective terrain, then moving your infantry. If you are the attacker, you can do it by bringing your infantry up in APCs, with heavy smoke cover. Unload adjacent to the armor, preferably in protected terrain, then, send your APCs into the enemy square. Enemy units will target the APCs since they are in the same square. By the time your APCs are destroyed, your infantry will have had time to move in, and will have several pulses of firing accumulated. Infantry can be very effective on the attack if used in this way, provided the terrain has lots of cover and protected squares. If you have armor and are trying to avoid infantry, the best approach is simple. Stay away. On the attack, send in reconnaissance units and keep them moving to spot infantry. Then, bypass squares which contain it. If infantry enters your square, keep moving. When defending against infantry, have some units target enemy APCs while still loaded. Try to position yourself so that assaulting infantry must move through unprotected terrain, where it is very vulnerable. If you must assault infantry, have your tanks (or other high SS weapons, including self propelled artillery in direct fire mode) accumulate a full four pulses of firing before entering the enemy square. If you can get the enemy infantry past 100 suppression before entering the square, you can probably destroy it. However, your tanks are vulnerable in the meantime to light ATGMs and other fire. Notice that these tactics require good command and control, since you will have to constantly change your movement orders, depending on where enemy units move. If you have units which are not in command and control, use them for supporting fire.

Conclusion

These are the tactical algorithms which determine combat results in Mech Brigade. It is up to you to choose, deploy, and use your forces to take advantage of them. Good luck! *[Ed: The same basic algorithms and strategies work in* Kampfgruppe, *CGW's 1985 Game of the Year.]*

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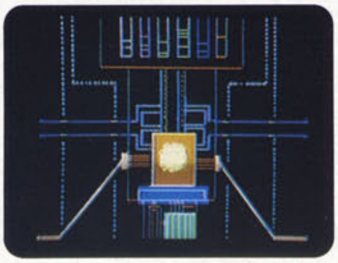
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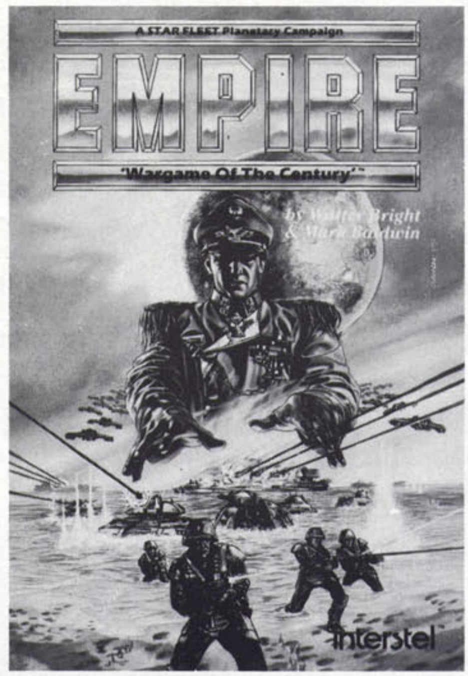


TITLE:	Empire
SYSTEMS:	Amiga, ST, IBM
# PLAYERS:	1-3
PRICE:	$49.95
DESIGNERS:	Walter Bright Mark Baldwin
PUBLISHER:	Interstel Corporation Webster, TX

EMPIRE

The Rise and Fall of Random Empires

By William "Biff" Kritzen



While *Empire* is the latest release from **Interstel**, it is not entirely a new game. The history of this game is rooted in the history of computers themselves. It is a mainframe game that has found its welcome way to the personal computer. Many people are aware of this game from the public domain, but the game was not really supposed to be public domain. Walter Bright created the game while he was at Cal Tech (California Institute of Technology) and completed a version for the VAX which has been distributed by DECUS since 1980. Dr. Trevor Sorenson of Interstel saw a mail order version of the public domain game in 1984 and approached Bright in 1985 about publishing a personal computer version of the game. Bright's hands were tied because **Epyx** had originally signed to do a commercial distribution of the game for home computers. Fortunately (for Interstel) Epyx backed off the project so that Bright got the rights back from Epyx in 1986. At that time, Bright contacted Interstel and an improved version was published.

Those who played the public domain version will be impressed by the addition of escorts, patrolling, click and drag interfacing, capacity for cruisers and battleships to bombard, and increased destroyer speed. As in previous Interstel releases, a la *Star Fleet I*, the playability of an already successful system has been significantly enhanced. In fact, it has been made *too* user friendly. The game flows so smoothly that it is hard to break away when needed, such as when the phone rings, nature calls, or the boss says,"Quit playing that game and get your review written!"

Bataille A Trois

Up to three players, in any combination of computer or human opponents, can play and computer players can be rated standard or expert. There is also an efficiency rating that can be used to handicap any of the players by varying either the rate of production or the combat efficiency rating applied to the player. Both can be adjusted upward or downward in any combination, so it is extremely simple to customize one's opponent(s).The game even has a play-by-mail setting.

Once the players are set, players choose the map to be played on. The program contains a number of pre-set maps that include: the Caribbean, the Mediterranean, S.E. Asia or any of several configurations that come with names like Weird I, Weird II, etc. The most popular map, though, is the randomly generated one that changes with each game. These randomly generated worlds are composed mostly of islands and contains numerous sea lanes to defend. With a rectangular map grid that is 98 squares by 58 squares, there is a lot of world to conquer!

Veils From The Darkside

Players begin with the knowledge of the total number of cities there are to conquer, usually 65-70, and the screen shows the player's starting position. This is important because that is all the player sees. The computer neatly handles "fog of war" by showing only the eight squares surrounding the active unit. As units move through new territory, the areas become known and stay visible while the surrounding squares remain black. The term, "left in the dark," really fits.

There are many user-friendly commands in the game such as: setting patrolling patterns for ships; establishing flight paths for planes, etc., that really make the game play smoothly. This is fortunate because this is a *long* game. We set up three-player games on several occasions and, each time, we spent an evening before we even came into contact with each other. "It's a big world out there, kids!" The game goes much quicker in solitaire mode, but it is still a long game.

Guns or Butter?

Next, comes the production phase. This is actually the heart



of the game and it is here that the game is won and lost. Each conquered city can produce a unit of varying types. Cities that are inland can produce armies or fighters, while port cities can, in addition to armies and fighters, produce transports, destroyers, subs, cruisers, battleships, and aircraft carriers. Knowing *what* to produce and *when* is the key to victory. Each unit requires a different duration to produce. The spectrum runs from the minimum six turns to produce an army to the maximum sixty turns to produce battleships. Additionally, once a city has produced a unit, it requires less time to produce more of the same types. Armies only take five turns to produce and battleships take fifty thereafter because the city's industry has been tooled up.

The variety of units in this game is impressive. Armies are the slowest moving units with a range of one square. Fighters can move five squares (with a total range of twenty before having to refuel). All the ships move two squares with unlimited range, except for destroyers which move three squares. As ships take damage, their speeds are adjusted downward. (See Table #1 for a complete summary of unit capabilities.).

Unit Summary Chart

	Army	Fighter	Troop Transport	Sub-marine	Destroyer	Cruiser	Aircraft Carrier	Battle-ship
Speed	1	5	2	2	3	2	2	2
Hits to destroy	1	1	3	2	3	8	8	12
Damage per hit	1	1	1	3	1	2	1	3
Attack Factor	1	1	$\frac{1}{2}$	1	1	1	$\frac{1}{2}$	1
Defense Factor	1 $\frac{1}{2}$*	1	$\frac{1}{2}$	$\frac{1}{2}$	1	1	1	1
Bombard-ment	No	No	No	No	No	Yes	No	Yes
Cargo Capacity			Six armies				Eight fighters	
Cannot See	Subs (1)	Subs	Subs	Armies Fighters			Subs	Subs
Initial Prod (2)	6	12	30	24	24	42	48	60
Cont Prod (2)	5	10	25	20	20	35	40	50

Note (*): Against bombardment only.
Note (1): Abbreviation for "Submarines."
Note (2): The production turns given are for a production efficiency of 50 percent.

War Is Swell!©

Combat is conducted by moving into the square of the opposing unit. The computer then takes all the appropriate factors into consideration (damage previously taken, unit combat strength, vulnerability of target and luck) and eliminates the loser. It really hurts when a transport with six units on board gets sunk by a defending army that was waiting in one of those undiscovered black squares. Cities are attacked as if they were enemy units and, once captured, are immediately adjusted for production. Battleships and cruisers can bombard any coastal square and are invaluable for supporting any invasion that might meet resistance onshore.

Phase The Facts!

The game has three phases to it. First, explore your home territory and build transports to launch your initial explorations/invasions. Then, after you have met enemy resistance, (sometimes immediately; but hopefully, not until after you have had time to conquer a few islands and build up a decent industrial base) you need to formulate a plan of attack and defense. The game will be won or lost during this second phase. What you build and where you build it will determine whether or not you proceed to the third or mopping up phase.

There are several philosophies to playing Empire. I favor the army/cruiser/battleship approach. I initially build armies to explore my homeland and capture cities. Some people prioritize fighters because they can cover more ground for exploration. They can't participate in assaulting cities, however, and they take twice as long to build. This seems questionable to me, since speed is of the essence in this phase of the game. Then, I build one or two transports to get my armies off the home islands. When the transports are completed, I change my home base production to building cruisers and battleships. As I explore a new island and capture cities, I build armies. That gets the troops to the front lines quickly. I don't build destroyers because they can't bombard, and will die when they come up against anything heavier. I build subs when I don't know what else to build. I've found that a fleet of cruisers and battleships can handle any sea invasions from the other side, can easily sink any carriers or subs they run up against, and most importantly, can support invasions, defend beachheads and protect the approaches to cities that are being counterattacked. I've played Empire

solitaire a dozen times, have pushed both computer players up to expert level with increased production of one and a half times my own, and this approach has worked every time. I haven't been able to try this strategy to completion in any face-to-face games because they have taken way too long to complete, although you can save the game after any turn.

Ten Commandments (not necessarily etched in stone)

1. When using transports to unload in an invasion, move as close to a city as possible and attack it from the sea. If you move overland, you're more susceptible to attack from enemy units. Once you capture the city, build armies in it. You'll probably need them for reinforcements.
2. Use your cruisers and battleships to clear the landing area of enemy units. Better yet, land where there aren't any enemy units and let the battleships and cruisers pick off enemy troops that move against any of your invading units. Choose an area for your ships that you can position your units behind. As the enemy moves towards your land units, your ships can pick them off.
3. In a situation where you want to circumvent enemy armies in order to attack a city, do not attack the armies. Simply move past them (after all, there are no zones of control) and let them attack you. Land units seem to defend much better than attack. At sea, I haven't noticed this trend.
4. If you find an enemy carrier, send a cruiser or battleship right for it. Carriers go down very easily and they usually have a full squadron on deck when they go. Planes can chew up infantry pretty well, so keep some ships around at all times.
5. Always watch your back door. The computer uses seapower very effectively and will continually try to slip transports into your rear areas. If you haven't left a garrison or two on any of your islands, or kept some ships patrolling the sea lanes you'll find some previously friendly islands becoming hotbeds of rebellion.
6. Fighters and cruisers work extremely efficiently in tandem. Use the fighter to sweep the area and act as reconnaissance. Then, bring the cruiser in for the kill. This particularly works well in "Search and Destroy" missions where elusive transports are the targets.
7. Repair ships in forward ports. It takes too long to travel to rear areas and redeploy. After all, you might need to pull a ship out of repairs early in order to protect the port. A cruiser/battleship in port, under repair or not, can defeat anything that tries to attack the port except a transport. This is a good way to defend a port from invasion, just watch out for any unfriendly transports.
8. Keep updating your production cities. As you conquer forward islands, readjust your rear-area cities to produce ships and fighters. Use the newly conquered, frontline cities to produce armies. Your transports won't have so far to go to reload and you will have lots of troops up front when the enemy counterattacks.
9. Don't butt your head against the wall. If you don't have enough troops or support ships to take an area that's heavily defended, avoid it until you have built up enough of an invasion force.
10. Finally, don't accept an enemy surrender, crush him totally. Given a chance, he would do the same to you. Normally, I would not be such a cold, heartless bleep, but after investing forty or more hours in one of these games, and suffering two or three humiliating, crushing defeats in a row, the computer's got it coming. Lose this game a couple of times and you'll know what I mean.

If there were an eleventh commandment it would be: "buy this game!" It's addictive, a tough challenge, and most importantly, fun to play!




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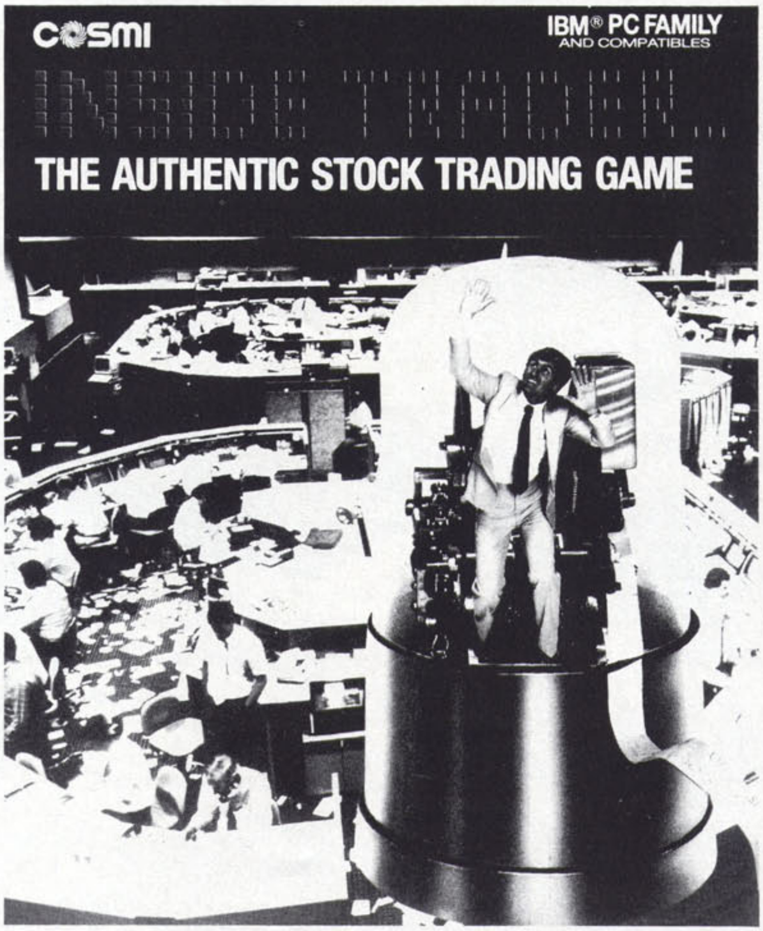
THE "COSMI"C STOCK EXCHANGE:

A Review of and Strategy for "Inside Trader"

by Jasper Sylvester

TITLE:	Inside Trader
SYSTEM:	IBM
PRICE:	#24.95
DESIGNERS:	Soft Serv
PUBLISHER:	Cosmi Corporation Wilmington, CA

Inside Trader is fun, fast, and fascinating, but it is *not* "The Authentic Stock Trading Game" it is billed as. Nevertheless, it is interesting enough for prospective stock market manipulators of simulated securities environments to pay attention to. Players are given $30,000 dollars in seed money. Like the panicked stock broker caricatured in *Doonesbury* a year ago who was worried about losing his job if he didn't make a million dollars before he was thirty years old, players are expected to turn that thirty thousand into millions before the play session is over.



Tale of the Ticker Tape (Game Overview)

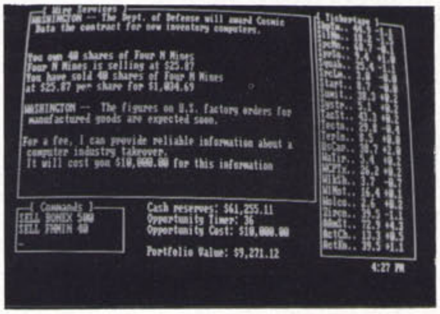
This is *not* a static game. The screen is constantly moving. On the right hand side of the screen, a window displays a real-time ticker tape which is perpetually being updated. Most of the screen functions as a wire service window where news stories related to the various industries are frequently being typed and where players are approached by informants with the "inside information" necessary to make high-yield investments which pay off rapidly. Below the wire service window is the command entry window where the real action (i.e. buying, selling, viewing portfolio holdings, and getting instant quotations) takes place. The program is friendly in its use of function keys to speed up purchases and sales. Further, the program allows the player to customize both the corporate data base and the random event generator. This capacity ameliorates somewhat the most important criticism listed below.

Portfolio of Problems (Critical Remarks)

The game suffers with regard to realism, however, in several minor areas and one major consideration. Minor areas include the lack of a sales commission assessed in securities purchases and sales, the absence of taxes charged to a profitable sale, and the fact that the market does not discount earnings reports as much as actually occurs on the Big Boards (NYSE and ASE). The major problem, which can also be a remarkable opportunity once one is aware of it, is the random event generator. The minor events like, "Oxychem's Audrey II plant food found to increase carnivoracity in house plants," are humorous and useful with regard to their effect upon individual stocks. The major events, however, make the game fun, but cost it realism. After all, if Jesus returns as he promised in the book of Revelation and declared all stock brokers to be sinners, it would have decidedly more impact on the world than to reset every stock's value to $1.00 per share as happens in the game. Indeed, one would be hard-pressed to convince this reviewer that even an AIDS virus which only affected stock brokers would reset any national securities market to $1.00 per share for every stock. Yet, this is what happens in the game. The same would be true if "Companies in the Inside

Trader game" were ". . . to be indicted for inside trading."

Of course, since this means that securities are never reduced below $1.00 per share, it means that it is advantageous to buy all the shares one can when these cataclysmic market shake-ups occur. Since these cataclysmic events occur with uncomfortable regularity, it also means that players need to learn to make their profits in a hurry, liquidate their portfolios as soon as possible, and keep large cash reserves on hand whenever possible. This way, players will not be hurt by these fantastic events.



Inside Information (A Strategy That Works)

Besides regular news reports available to the players (such as found in most stock market games) this game goes a step further and has informants which approach investors with: "a little information about;" "some information about;" and "some reliable information about" a certain industry or a particular corporation (hence the title of the game). Of course, "reliable information" is better than "a little information" and "some information," so the fee (bribe) which the informant wants is priced significantly higher. Now, the more one pays for information, the more profit one is going to have to make just to break even. Further, all of the information is not accurate. Therefore, the challenge is to make the profit without having to pay the informants.

In order to accomplish this, one must know which corporations belong to which industry group. It takes too long to find each corporation in the master list included with the documentation in the game and time is of the essence, so it is suggested that one use the table included with this article. Then, when an informant approaches the player with "some information about" or "some reliable information about" a particular industry, the player can use his cash reserves to purchase the securities of every company in that industry rather than purchasing the information from the insider. Note: more often than not the industry in question will experience a gain (although it *can* go the other way on occasion). This accomplishes three objectives within the game's parameters. First, there is usually a coattail effect within the industry and other corporate stocks go up when a merger (often the subject of the proffered rumor) is consummated. This may be unrealistic in the "real world," but it works in this environment. Second, it enables the player to get in on the action without shelling out money for information. Third, it allows the player to trade on inside information without running the risk of being investigated by the Securities and Exchange Commission (and this *does* happen in this game).

After quickly purchasing all the stocks available in the industry group, the player should hold the stocks until a major announcement is made regarding the designated industry. If the announcement is a merger or new product announcement, almost the entire portfolio will be profitable. If the announcement is bad news, the player will lose some money before he liquidates the portfolio. Nevertheless, the probabilities for good news outweigh the bad. In either event, the player needs to liquidate that portfolio soon enough to get his profits and maximize cash reserves for the next tip. This system may sound simplistic, but it has always worked for this reviewer and seems sound enough to help others turn their nest eggs into millions. If only it were this real on Wall Street.

INSIDE TRADER'S CORPORATIONS LISTED BY INDUSTRY GROUP

Aerospace	**Automotive**	**Chemicals**	**Computers**
AEROC	AMTIR	ACTCH	COSDT
FUSFM	AUTMT	FUTCM	DATCN
JETTC	GNCYC	NEWCM	HITEC
LASLB	MSMOT	ORTHN	KOLCM
LFLUN	MTLTR	OXYCM	PROTC
LUNLB	PRMOT	PLMPR	RAMCP
RETOR*	USCAR	PLYTR	SFTSV
SPRSN	WATIR	ZIRCN	TECTN
START	WLMOT		
Entertainment	**Mining**	**Petroleum**	**Pharmaceuticals**
ACTEN	BONEX	EXLON	APTHM
EMPIR	FNMIN	FOSFU	DEWLY
FUNTC	LODMN	GNOIL	DNAIN
GXYRC	MUSMN	GULGS	ELXPR
MGCIN	SILMN	NODAC	GENTC
MOGPR	SPCMN	NOOIL	LIFIN
NATNV		PETPR	NARCT
ROKRC		PEXCO	PHRMT
SUMIT		PRPET	SQUAB
SYSTR			
Retail	**Steel**	**Timber**	**Textiles**
ALWAY	AAMST	ASPAC	BLSFN
BULLS	ENCST	CANHM	MARML
FENFD	PITST	CEDCP	MCKFB
MATHM	TACST	FORPR	POLYP
MONDO		LRLAM	RDYWR
REDFL		PITPR	TERIN
SAVRT		PTPLY	WCPTX
SERVU		RAITM	WLKSH
SHPTM		RENRS	WOLCO
		SRCLM	

*(The documentation lists this as RETRO, but the program recognizes the security as RETOR.)

Legacy of The Ancients

CGW's resident adventure expert takes us on a tour of a very bizarre museum in this review of a popular product from Electronic Arts.

TITLE:	Legacy of the Ancients
SYSTEMS:	Apple II, C-64/128
PRICE:	$29.95
DESIGNERS:	Chuck and John Dougherty
PUBLISHER:	Electronic Arts San Mateo, CA



By Scorpia

It sits in the desolate northeast of Tarmalon, far from the prying eyes of the primitive natives. Erected centuries ago by strange, alien beings, known only as The Ancients, it is a place of both education and amusement: The Museum. For uncounted years, only the Ancients walked its long, winding corridors, depositing gem-like coins to view the exhibits of this minor world. Then one day, an innocent Tarmalon peasant stumbles across the body of a strangely-garbed man, clutching a scroll in one hand and an odd onyx disk in the other. For this peasant, a new role in history is about to begin . . . .

Type Cast in Tarmalon

Legacy of the Ancients may remind people somewhat of Questron, which is no surprise, since it has the same authors. The graphics have been changed, but one can still see echoes of the previous game, particularly in the matter of the character you maneuver through the adventure.

Unlike most games of this type, your alter-ego is always pre-set and possesses the same attribute values in each game. There is no option to create your own unique, individual character. It is, at least, a great time-saver and gets you right into the thick of things from the start.

There are only six attributes for your character: Strength (the higher, the more damage you do), Endurance (the higher, the less damage you take), Dexterity (the higher, the more often you hit, and the less often are hit), Intelligence (the higher, the more successful you are with spells), Charm (the higher, the lower the prices on merchandise), and Hitpoints (the higher, the harder you are to kill).

These attributes are raised in various ways throughout the game: by training at the Weapons and Armor schools, by playing the Stones of Wisdom, by successfully completing quests, etc. Hitpoints go up only when you achieve a new level of experience, granted to you by the Museum's Caretaker.

Trails from the Black Museum

You begin inside the Museum itself, after first reading about how you managed to enter this otherwise-inviolable building and why you are there. The major quest is to nullify the power of the leather scroll, which is actually a compendium of spells of great evil (no, you won't get to use any of those spells during the game).

Before you can do that, however, there are a number of minor missions (relatively speaking) that you must undertake first, which involve using the various Museum exhibits and travelling across the length and breadth of the land, as well as other less-savory places, such as dungeons.

After completion of each task, your character becomes stronger and more powerful, going up in level and attributes, better able to fight, and more proficient in spell casting, until (at last!) he/she is ready for the final confrontation (yes, as usual, there is a main bad guy to defeat).

The major continent of Tarmalon is fairly extensive, and you will be doing a lot of travelling outdoors. Transportation is limited to travelling on foot and by raft; there are no horses (except at the very end) or other means of getting around, although you can buy a spell that will teleport you back to the Museum from wherever you may be in the wilderness.

Naturally, as you travel, you will encounter a number of unpleasant beings, mostly monsters. Killing them does not help your experience level, but it does provide you with money and, occasionally, other items as well, such as weapons and armor or possibly, a Museum coin.

Some encounters, however, need not end in battle. Once in awhile, you will be met by creatures with something for sale: weapons, armor, Museum coins, potions to restore hit-points, food, etc. It's up to you to decide whether or not you want to buy whatever is being offered. If you refuse, the creature will simply leave, often with the cheery remark, "You passed up a good deal!" What you have to watch out for is: (a) some of the monsters you fight will also be the same type who occasionally offer to sell something and (b) what you buy may not be worth what you paid for it.

Farmers, Striders, and Pixies are non-hostile; they will always offer something for you to buy. All the rest, however, are very chancy. One time an Eaton Warrior may want nothing more then to sell you a shoddy leather hide (while proclaiming it to be excellent), another time he may simply want to bash your head open. Of course, there will also be those creatures who are just totally hostile, with nothing to offer but a quick death. After playing for awhile, you should have no trouble distinguishing which are which (grin).

Also in the outdoors are a number of towns. Not all towns have all facilities, but among them you will come across healing shops, food stores, magic emporiums, training arenas for endurance and dexterity, armories, banks, loan associations, gambling dens, buy-back shops, purveyors of rafts and climbing gear, and fortunetellers.

The fortunetellers, for a small fee, will give you some hints and clues regarding the quests in the game, or reveal what weapon is most effective against which type of creature (good idea to carry several different ones), or give you the old con job ("I see you winning a fortune at blackjack!").

The University of Dexterity

The training arenas (there are four altogether) are actually arcade-style games. The Weapons Schools (in Alanville and Laingsburg) put you in the center of a rectangular room, then send fireballs at you from different directions. Your job is to shoot them with your crossbow before they hit. The better you do, the greater the increase in your Dexterity when the session ends (this happens when you are hit five times total).

Armor training (Grand Ledge and Thompson's Crossing) is somewhat similar, although in this case slightly easier: you need only block the fireballs with your shield. Again, when you've been hit five times, the session ends.

The only thing to be careful about is a poor performance, which could cause a LOSS of Dexterity or Endurance. The game keeps track of your attribute levels, and as they increase, the training sessions start at higher

levels of difficulty. Eventually, you will come to a point where your own skill with the joystick (or keyboard; joystick recommended for this) has reached its limit, and that's when you should stop, since you'll never get any better, and may actually begin to lose points (it's a good idea to save the game before you try the arenas, even though you do get practice if you want it).

Adventures at an Exhibition

The heart of the game, however, is the Museum and its exhibits. Some of these exhibits actually transport you to different places on Tarmalon (such as dungeons) or provide you with weapons, money or other items. It is perfectly safe to stroll through the corridors of the Museum itself. There are no monsters roaming the passageways.

In order to use the exhibits, you need coins. Not the ordinary gold coinage of Tarmalon, but special gem-like coins, of varying types: jade, topaz, sapphire, amethyst, turquoise, ruby, and diamond. Each of these is usable for one or more exhibits.

You start with two jade coins and acquire the rest in various ways, usually by purchasing them from merchants in the towns. When a merchant will offer a coin seems to be randomly determined, and you don't know which one you have until after you've bought it. Typically, jade coins will be offered early in the game, and other types later on.

The exhibits are in a rough ascending sequence, and you have to finish one set before you can go on to the next, making the game rather linear in nature, for all the wandering you may do in the wilderness. For instance, you have to complete all three jade exhibits before you can move on to the topaz ones. The exact order in which you do each exhibit in the set isn't important, so long as you do them all.

It is of VITAL importance that you view each exhibit, as viewing exhibits is part of the level advancement scheme. One exhibit, the Tapestry, serves no real purpose in the game. While it is a map of the continent, it shows no useful information. Since an amethyst coin is needed to view it, and amethyst coins are also needed for the truly important Stones of Wisdom, some people may be tempted to skip the Tapestry entirely. Don't do it! That exhibit, like all the others, must be activated.

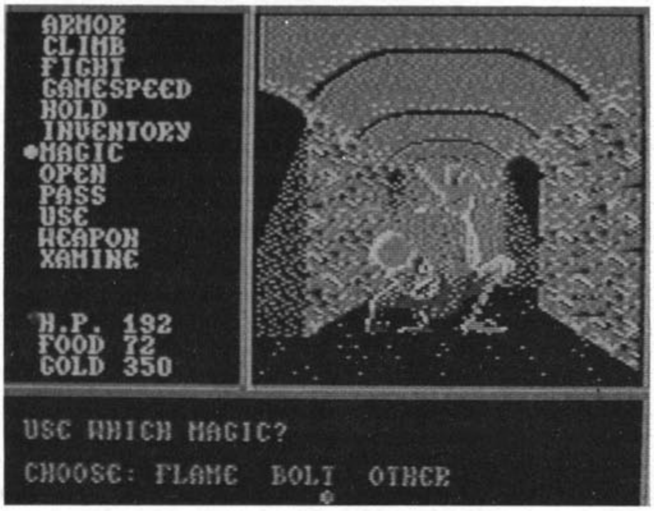
The three jade exhibits are Thornberry, Weapons, and The Fountain. The Thornberry exhibit will actually send you there, and even give you a little cash to spend. Weapons will provide you with a decent, if primitive, weapon and The Fountain will give you money in exchange for a promise to locate and return a stolen magical flower.

Once you've seen those three, you will start to pick up topaz coins, allowing you to use the next set of exhibits: Pirate Treasure, Herb of Life, and Native Currency.

As you might expect, Native Currency provides you with a nice chunk of cash. The Herb of Life, after you've opened it, will allow you to buy herbs of life at the healing shops. Pirate Treasure is the first of the three dungeons you must visit in the game. At the bottom is the sapphire coin that will open the way to the Lost Exhibits, a second series of exhibits, ordinarily hidden away from casual visitors.

Spelunking for a Spell

The dungeons (all three of them) are not especially difficult in terms of mapping, although the third one (Four Jewels) does have a trick or two to it. All are eight levels deep, and naturally there are monsters lurking on each level. These critters are specific to the dungeons; you won't find them anywhere else. Some have rather nasty abilities, such as breaking your weapons, eating your armor, or reducing attribute points, so you want to get rid of them as soon as possible.



For that reason, you should always go into a dungeon armed to the teeth with spells, as many as you can afford. While the selection is limited (there are only six spells in all), the ones available can do the job. Magic Flame, Firebolt, and Kill Flash are the best ones to have. You can purchase up to a hundred of the first two, and twenty of the third.

Of course, you will find treasure (mostly money) in the dungeons, as well as little boxes that, when opened, restore hitpoints. A few of the boxes are trapped, however, and will explode upon opening. There is no way to distinguish good boxes from bad boxes, so opening a box or chest is a little chancy.

There are other traps in the dungeons, too, so make sure to examine every stretch of tunnel or corridor for hidden dangers before you walk down it. Once a trap has been discerned, you can safely walk past it without worry. Traps made visible this way will remain visible until you leave the dungeon.

The remaining two dungeons are found in the Lost Exhibits; they are The Test and Four Jewels. The Test is a tough one: you're placed at the bottom of the dungeon (a mean one) and must find your way out. Good thing that getting out will automatically return you to the Museum!

Four Jewels, as you might expect from the name, has four jewels scattered around its bottom level for you to find. Reaching the lowest level is a bit tricky, so make sure you map accurately here. This one is just as nasty as The Test, so do come prepared.

Castling Out of Check

Aside from the dungeons, there are also two castles. One sits in the middle of an inland lake, the other is the endgame sequence, which you won't be able to reach until you've obtained the diamond coin (and the diamond coin won't be available until you've achieved seventh level).

The first castle (two levels) contains the magic flower and several other items of interest. You can walk anywhere along the first level, and so long as you don't open any chests, the guards won't bother you. Be alert for secret doors in the walls; they're important.

The second level is private and if any guards see you up there, they will come to attack. Fortunately, there is a way around this, if you've gotten the right hints from the fortunetellers. By the way, the castles do not reset when you leave them: once you've looted a chest it stays looted, so you can't use the castle as an endless supply of money.

Since you're going to have to open some of those chests scattered around, it's best to go into the castle prepared. Spells in general will not be as effective here as in the dungeon, so much of your guard-elimination procedures will have to depend on weaponry. Make sure you have plenty of healing herbs with you before you embark on any chest-opening expeditions.

The second castle is nastier by far. It is the domain of the evil warlord who is in possession of the scroll (for those who may be wondering, somewhere early in the game you will be ambushed by bandits, severely beaten, and the scroll stolen from you; this is built-in and can't be avoided).

Guards in this castle are not at all friendly, they are tougher to kill, and they are not as dumb as their counterparts in the first castle. You can't sucker them into following you to a narrow entry where you can take them out one at a time. Instead, they have assigned areas and will not move out of them under any provocation. So, you're just going to have to wade in there full tilt and start swinging.

On the other hand, this has one advantage: if you're getting low on hitpoints, you can back off (if not surrounded), munch some healing herbs, and then return to the fray. So bring lots of healing herbs with you; you'll be needing them.

After you locate the scroll (no easy matter), you have to fight it out with the Warlord. Fortunately, he isn't quite so bad as the guards. Unfortunately, his guards are also very dedicated. Once you kill the warlord, the castle will

(Continued on page 50)

GOODBYE "G" RATINGS

The Perils of "Larry"



The New Wave of Adult Entertainment Software: Part Three

by John Williams

In the first two parts of this series, John presented his case for the place of adult software in our hobby (CGW #39 and #40). In this summary article for the series John takes a more subjective look at the question.

In my last two articles for *Computer Gaming World*, I spent significant time writing about the origins of adult software and what attempts governments and people have made to hinder or stop its release. Most of the material in those articles was gathered in the early summer of 1987, before or very soon after the release of **Sierra**'s *Leisure Suit Larry in the Land of the Lounge Lizards*, a game openly marketed as an "adults only" product.

By late November, Leisure Suit Larry had been shipping for over five months. There had been reviews, protests about the product, and hate mail. My first two articles on the subject of adult software have been published and some of the readers don't like the subject at all. This last article in the three-part, "Goodbye G Ratings" series will detail some of the more interesting episodes that have come about from the release of Leisure Suit Larry.

I will apologize in advance for the rather personal and "unprofessional" style this article displays. I tried to keep up the "industry pundit" style of writing evident in my last two articles, but the events in this article hit a little too close to home.

> *Dear Sierra,*
> *I read with regret in your recent newsletter that you intend to go into the porno software business. How any company with your fine products and reputation can make such a poor decision is beyond me . . . The glorification of loose moral behavior has caused a rise in social disease and divorce and a general decline in the quality of American society. The money you make from this venture into filth comes at a high price . . . .*

I lifted this text from one of the first letters that Sierra received regarding our release of Leisure Suit Larry. Despite its occasional lapse into self-righteousness and ridicule, it made a great attempt to tell us why the publishing of Larry might be a mistake (Not that I agree, but I appreciate an argument well presented). It was one of only a very few to arrive until my first article for CGW appeared. Then the deluge began . . .

> *Dear Sierra,*
> *Please drop that purile, obviously immature slimeball John Williams* [Marketing Director, please!] *into a greasy brown wrapper and drop it in the nearest trash compactor . . . .Please remove my name from your customer list. I don't need trash, I can get that anywhere.*

> *Dear Mr. Williams,*
> *Recently, I purchased your HomeWord Plus program. I am very happy with it, but I am returning it because I cannot tolerate your behavior . . . . I have read your little "editorial," where you trumpet the arrival of filth and perversity in computer gaming . . . . I will not do business with any company that would give a job to someone like you . . . .*

I consider these two letters to be fine representations of the "fan" mail that I received after Larry shipped. Both customers were fairly abusive to me personally and both notified me that Sierra had lost their business. While I question some of what is said in these letters (My actions should not affect the royalties going to the writers of HomeWord Plus and I am *not* purile), I had a feeling that I might receive some of them.

I expected a few negative reactions from the consumers (you can't please all the people, etc.). What I, and Sierra, did not expect was the reaction that we received from the industry itself. Our largest customers were very noncommittal. A few, that must remain nameless (they pay the rent), wouldn't handle it at all. Some of the major chain stores would stock the product, but refused to advertise it (which represents a significant cut in sales volume). One distributor that publishes a very influential bestsellers chart would not list the product although it outsold most of the products listed (including a few Sierra products that made the chart). An independent dealer from North Carolina, who was sent a demo copy for evaluation, sent the sample back, cut smoothly in two with a hacksaw (no letter accompanied this item). At the same time, the sales numbers for the product skyrocketed. Obviously lots of retailers were selling lots of Leisure Suit Larry, but no one wanted to admit it.

Inside Sierra, equally interesting things were happening. One of our finest customer support people quit because she refused to answer questions on Larry. A highly

respected prospective applicant for our quality assurance (debugging) area had to be bypassed because he told us up front he would refuse to work on Larry conversions and planned sequels (good computer-knowledgeable people aren't easy to find in Coarsegold, CA). My own boss, originally very excited that I had been asked to write some articles for CGW, began pressuring me to bury the project and work on something else. As the IIGS version went into production, our President demanded that all jokes based on "gay life" be removed from the product, even though we had not received a single complaint on the matter. In short, as the product gained sales momentum, the company was seeming to grow embarrassed by it.

The computer magazine reviews of Larry also gave reason for pause. There were many good reviews, but mixed with these were many pieces by writers on a soapbox. The highly influential *MacWorld* magazine panned the game by saying that the "game contributes nothing to enlightened male attitudes toward women" and *Info* blasted both Sierra and Electronic Arts (distributor of the Amiga version of Larry) for treating women as sex objects. *CGW*, perhaps worst of all, published a quick and simple way to bypass the trivia test in the product that was designed to keep youngsters out of the game. *[Ed: The original intent of giving the bypass tip was to allow our readers (most of whom are over 18) to avoid some non-essential preliminaries. In looking back, we probably should not have published the tip.]*

Although I have never felt like it was the responsibility of computer entertainment software to promote enlightened attitudes toward women, I should point out that we have received a number of letters from women who played and enjoyed our game. Many of these women seemed to think that Leisure Suit Larry exposes macho, chauvinistic men for the jerks they really are. I believe that Larry provides humorous shock treatment for those males that aren't yet "enlightened toward women" by showing chauvinism as the stupid prejudice that it is.

Which brings us to the point of social responsibility. In the motion picture industry, it is the responsibility of the movie company to submit each finished product to the MPAA for evaluation. Each product is given a G, PG, PG-13, R, or X rating (the triple X rating on some movies is strictly a marketing ploy). Through this system, the motion picture industry has circumvented the threat of government controls and given concerned citizens a way to steer clear of those titles that offend them. The MPAA is a socially responsible organization that works.

Should such a system be put in place for computer software? For an expert opinion, I asked Ken Wasch, Executive Director of the Software Publishers Association of America.

"Adult computer software is nothing to worry about. It's not an issue that the government wants to spend any time with . . . . They just got done with a big witchhunt in the music recording industry, and they got absolutely nowhere . . . ."

Ken's job is to protect the interest of computer software publishers in Washington, so he would hardly be expected to advocate the initiation of a ratings standard that would cost software developers millions each year to enforce. Ken is a genuinely great guy, however, and in later parts of our discussion (parts that didn't lend themselves to quotation), Ken did advocate voluntary uses of warnings on adult-oriented software packages and pointed out that if it ever did get to be a problem, the government would get involved. Ken was also very helpful with the wording on the warning labels (he practically dictated the warning used on the present Leisure Suit Larry box and the soon-to-be-published Police Quest boxes). [*Ed.: the warning on Leisure Suit Larry simply reads: "This game contains adult subject matter. Parental guidance is suggested"*]. His overall opinion seems to be that as long as we attempt to let the buyer know of anything possibly offensive inside a box, we have done our jobs as members of society.

I agree with this opinion, but a recent phone call put my resolution to a test. A woman from southern Illinois called to complain about Larry. It seems her son got a copy of the game from his friend at school and she caught him playing with it one night. It wasn't an authentic copy and the pirate that had "liberated" the disk of its protection had also laid to waste the opening warning screen and the trivia test designed to keep kids out of the product.

Is Sierra at fault because it originated the product that fell into the hands of her child? It would be very easy for me to say no. The child was using a pirated game. I wonder if she even chastised the child for receiving stolen property. The disk had been altered so that any child could get hold of it. Did the pirate feel any social responsibility when he put the altered software on a bulletin board system? On top of it all, Leisure Suit Larry contains no real nudity and doesn't get "rowdy" with the user unless he/she inputs some nasties of their own, first. We made every attempt to be socially responsible.

In summary, the whole issue of whether adult software should exist comes down to freedom versus censorship. Should Sierra stop making software that liberated adults enjoy because it might offend some other people or because, despite our best efforts, it might land in the hands of the young? In this country, there is a system of government that states "one man (or woman) - one vote." There is a capitalistic system that says, "If you don't like the product, don't buy it." Working within these two systems, Sierra and other software companies will learn whether adult-oriented software is a good idea.

If Leisure Suit Larry and its coming sequel continue to sell well (to date, Larry has been our most successful product launch, second only to King's Quest III), Sierra will continue to market adult games. If we do not continue to do our part to keep these products out of the hands of those that will be offended, concerned citizens will put their one vote to work and the government will attempt to put an end to development of "adults only" entertainment software (or, at least, make it difficult).

You, the consumers, cast your votes each day with dollars and opinions. In reality, the long term success of the adult-oriented software segment lies in your hands, not ours.

Legacy of the Ancients

(Continued from page 47)

self-destruct in five minutes. This is rather nerve-wracking, since the way you came in is not the way you can go out.

Therefore, you have to go running through an unfamiliar part of the castle, looking for an exit that hasn't yet been closed. As you might expect, there is only one, and of course there are guards in the way. You'll have to fight through them to get out alive. Let's hope you have some healing herbs left for this.

When you return to the Museum, you receive your final rewards: ascension to level ten, and another that I won't mention here. In some ways, it's not as fancy as the ending of Questron, but it is certainly more enduring.

Monster Hash

Legacy has some interesting features, among which is the ability to use the bodies of slain monsters as a food source. This can really come in handy when you're low on cash and your food supply is running low. Most of the time, it's safe to use the monsters as food, although now and then what you eat won't agree with you, and you'll take some loss in hitpoints. Fortunately, there is no poisoning as such, so this is more in the nature of temporary indigestion than anything else.

I liked the idea of using a museum and its exhibits as the focal point of the action. It's a fascinating concept that I hope the author will develop further in future games; there is much potential here. On the other hand, there isn't much in the way of interaction in the game. You can't really talk or hold conversations with anyone. Most of the people are merchants, and your dealings with them are fairly mundane: buying and selling items. Even with the fortunetellers, it's merely a matter of paying a sum and receiving a clue in return.

Once you get settled into the game, you'll find it has a very even tenor to it. Monsters and other beings you encounter don't change as your level increases, although in the outdoors, you may find yourself facing several at once. By that time, you should be able to handle them without much difficulty.

Recipes for Monster Hash

Combat is spell-oriented in the dungeons and weapons-oriented everywhere else, so save spells for dungeon expeditions. Remember that prices are not the same in every town, so keep notes on which places have the lowest prices on which items. Surplus weapons and armor can always be sold at an armory or buy-back shop. Check the prices of new equipment first, so you can get the best deal possible.

The manual that comes with the game is a slim one, but tells you pretty much everything you need to know to get started, and has some clues (printed upside-down) in case you become stuck here and there. Read it carefully before you begin the game.

Overall, Legacy is not an especially difficult game. Puzzles are few, and its linear arrangement makes it fairly easy to get through, once you have the hang of things. One minus is the endgame: once completed, you're stuck. This makes reaching level 10 rather a hollow victory, since you can't do anything with your character afterwards, such as save it. Obviously, if there are going to be any follow-ups to this game, your character won't be transferred over. So if you want to enjoy your level 10 status, make sure to save the game before going to view the final exhibit.

Bottom line: Legacy is a moderate RPG-style game, with some interesting touches; suitable for beginner and intermediate-level play.

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TEVEX Computer Software

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Triple Pack	$15	$15	$15		
World Class LB	$28		$28	$31	
"Course Disks	$15		$15		

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ACCOLADE	Apple	Atari	C-64	IBM	ST
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Law of West	$12		$12		
Mean 18				$34	$31
" Course Disk #2				$15	
" Course Disk #3-4				$27	
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Pinball Wizard				$24	$24
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Spy/Spy I & II	$12	$12	$12		
Sundog	$28				$28
Test Drive			$21	$28	$28

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ACTIVISION	Apple	Atari	C-64	IBM	ST
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Chmp Baseball	$28		$21	$28	$28
Chmp Football	$28		$24	$28	$31
G. B. Air Rally			$21		
Game Maker	$34		$34		
Hacker	$12	$12	$12	$12	$17
Hacker II	$28		$24	$28	$28
Labyrinth	$21		$21		
Last Ninja			$24		
Little People	$12		$12		$18
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Portal	$31		$28		
Shanghai	$24		$21	$24	$28
Tass Times	$24		$21		$28
Top Fuel Elim.			$21		
2 on 2 Basketball			$24	$28	$28

AVALON HILL

AVALON HILL	Apple	Atari	C-64	IBM	ST
By Fire & Sword				$18	
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Dark Horn	$24		$24		
Dreadnoughts	$21		$21		
Guderian	$21	$21	$21		
Gulf Strike	$21	$21	$21	$21	
Incunabula				$21	
NBA			$28		
Spitfire 40			$24		
Super Sunday	$24		$24	$24	
" " GM Disk	$21		$21	$21	
" " Team Disk			$15	$15	
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BRØDERBUND

BRØDERBUND	Apple	Atari	C-64	IBM	ST
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Cauldron			$21		
Choplifter-MM	$12		$12		
Lode Runner	$24	$24	$24	$24	
Lode R. Rescue		$21	$21		
Print Shop	$34	$31	$31	$41	
" " Companion	$28	$24	$24	$34	
PS Holiday	$18		$18	$18	
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PS Library #3	$18	$18	$18		
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Carmen-World	$28		$24	$28	
Carmen - US	$31		$24	$31	
Wings of Fury	$24				

DATASOFT

DATASOFT	Apple	Atari	C-64	IBM	ST
AR - City	$21	$21	$21		$28
AR - Dungeon	$28	$28	$28		
Dark Lord	$15		$15		
Mercenary		$21	$21		
" Second City		$12	$12		
221-B Baker	$21	$21	$21	$21	
" Case Library	$12	$12	$12		

DKG

DKG	Apple	Atari	C-64	IBM	ST
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Metz/Cobra		$30			
Objective Kursk		$30	$30		
Stalingrad		$30	$30		

Electronic Arts

Electronic Arts	Apple	Atari	C-64	IBM	ST
Adv. Construction	$12		$12	$12	
Age Adventure	$12	$12	$12		
America's Cup			$12		
Amnesia	$31		$28	$31	
Archon	$12	$12	$12	$12	
Archon II	$12	$12	$12		
Arcticfox	$28		$23	$21	$28
Bard's Tale	$31		$28	$34	$34
Bard's Tale II	$34		$28		
' Hint Book	$10		$10		
Business Sim.				$47	
Chess 2000	$28	$28	$28	$28	$31
Chuck Yeager	$28		$24	$28	
Demon Stalkers			$21		
Dragon's Lair			$18		
Earth Orbit	$24		$21		
Empire					$38
Grand Slam Bridge				$41	
Gridiron					$34
Harvard BS				$47	
Heart of Africa			$12		
Leg Ancients	$28		$21		
Lord's/Conq	$12	$12	$12	$12	
Marble Mad	$24		$21	$21	$24
M.U.L.E.		$12	$12		
One on One	$12	$12	$12	$12	
Patton Rommel				$31	
Pegasus	$24		$21		
Racing Destr.		$12	$12		
Robot Rascals	$31		$28	$28	
7 Cities Gold	$12	$12	$12	$12	
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EPYX	Apple	Atari	C-64	IBM	ST
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INFOCOM

INFOCOM	Apple	Atari	C-64	IBM	ST
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LANCE HAFFNER GAMES

LANCE HAFFNER GAMES	Apple	Atari	C-64	IBM	ST
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MICROLEAGUE SPORTS

MICROLEAGUE SPORTS	Apple	Atari	C-64	IBM	ST
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MLB 1986 TD	$15	$15	$15	$15	
MLB GM Disk	$21	$21	$21	$21	$21
Wrestlemania					$34

MICROPROSE

MICROPROSE	Apple	Atari	C-64	IBM	ST
Airborne Ranger			$24		
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Crusade Eur.	$28	$28	$28	$28	
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F-15	$24	$24	$24	$24	$28
Gunship			$24	$34	
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Nato Comm.	$24	$24	$24		
Pirates			$28		
Silent Service	$24	$24	$24	$24	$28
Stealth Fighter			$28		
Top Gunner		$18	$18		

MINDSCAPE

MINDSCAPE	Apple	Atari	C-64	IBM	ST
Balance/Power	$34			$34	$34
Defender Crown			$24	$28	$34
Gauntlet			$24		
Infiltrator	$21	$21	$21	$21	
Infiltrator II	$28		$24	$28	
S.D.I.					$34

ORIGIN

ORIGIN	Apple	Atari	C-64	IBM	ST
Auto Duel	$34	$34	$34		$34
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Ultima III	$41	$34	$34	$41	
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SIERRA

SIERRA	Apple	Atari	C-64	IBM	ST
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SIMULATIONS CANADA

SIMULATIONS CANADA	Apple	Atari	C-64	IBM	ST
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Golan Front	$42		$42		
Grey Seas GS	$42		$42		
Long Lance	$42		$42		
Op. Overlord	$42			$42	
Rommel Gazala	$42			$42	
Seventh Fleet	$42		$42		$42
Stalingrad	$42		$42		
To the Rhine	$42			$42	

SSG

SSG	Apple	Atari	C-64	IBM	ST
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Europe Ablaze	$34		$34		
Montezuma	$28		$28		
Normandy	$28		$28		
Reach Stars	$31		$31		
Russia	$28		$28		

Run 5 Issue #7 $4

BlackJack Academy™

by Roy Wagner

Name:	BlackJack Academy
Systems: Amiga	
	Coming for: C64,Ap2gs, IBM)
# of Players:	1-5
Price:	$49.95
Designer:	Dennis Saunders, PhD.
Publisher:	Microillusions
Distributor:	Activision

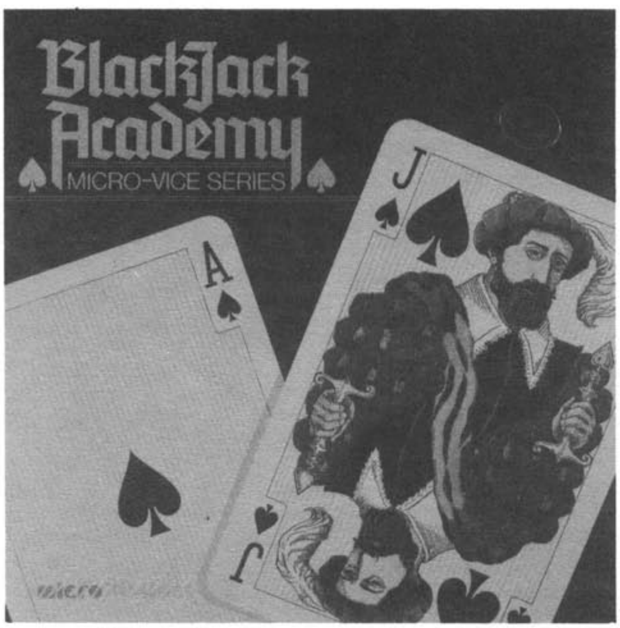
BlackJack Academy is more an environmental simulation than a true tutorial of blackjack. This is *not* to say that one does not learn how to play blackjack with this program, but, rather, that a fixed set of lessons is not utilized. One learns by playing blackjack *in a casino environment*. The sound of the chips being played on the green felt table, your choice of five possible seats, and the sound of the cards being shuffled and dealt, help to create a realistic casino ambience. Only the sound of clinking beverage glasses being delivered to the table and an occasional slot machine jackpot is missing.

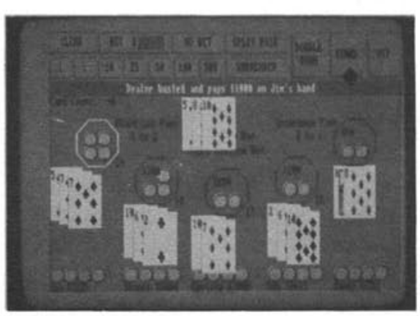
The small manual introduces the novice to the basics of blackjack in four pages and an additional four pages give instructions for program specifics.

The *Help* menu options explain the various blackjack play options (insurance, double down, split pair, surrender, and hit/stand) in greater text detail. Hard/soft card counts, rule variations, and some simple techniques of card counting and money management are succinctly discussed. These methods are easy and avoid the complex schemes of many other blackjack systems.

The *Setup* menu options let you modify the conditions of game play to your particular preferences. You can choose one or more seat positions specifying player name, starting amount of money and whether to display card point totals. (Very nice if you're not in the mood for low level mental gymnastics.) From one to six decks of cards can used. The minimum ($2, $5, $25, $100) and maximum ($100, $300, $1000, $3000) betting limits for the table can be set. The rules of the table can be set for major gambling centers (Las Vegas Strip or Downtown, Reno, or Atlantic City), liberal rules, or even custom rules.

The *Strategy* menu options provide you with general play and betting strategy. At any time, it will provide the optimal play for the current hand. This compares the dealers hand with yours and explains the best action to take. The hands of other players are not discussed. The card deck count display is only updated at the end of each round of play. So, if you want to seriously use this program's counting system, you must do it mentally for each player preceding the play of your hand. The number of cards remaining to be dealt and the current rules can also be displayed from this menu.





The default program startup uses Las Vegas Strip rules, one player in the third seat (middle), and $500 in chips. The only time the keyboard (rather than mouse or joystick) ever needs to be used is to modify the player's(s') setup.

I found this program/game/simulation both enjoyable and educational. I liked to fill all seats with "different" types of players ($2 betting conservative, $10 betting with no plan, $15 playing the system, $15 checking the optimal play, and $25 wild shot betting). I start each seat with the same amount of money and watch the totals vary. Winning is great, but losing it all only drops the player from his spot at the table. You can easily establish the player again with a new bankroll. Where is that pit in the stomach, emptiness in the wallet, and slow walk from the table? How do you simulate that without *real* money?

The program play is so smooth that it is easy to keep playing on and on. If you do notice the sun rising, you can save the game to disk and come back to it again. A small quick reference chart on blackjack play comes with the program which can sit right near your computer or be easily carried in your pocket when you decide to head for Vegas. The Amiga interface is fully used and this *does* include letting you multi-task. The game disk is copy protected.

This program is a good example of software that can be used for recreational fun, serious study, and possibly financial profit (or loss). The graphics and sound are at a quality level. The user interface is excellent. If you like playing blackjack or want to learn more about the game, this program is for you.

Reader Input Device

RID #43 (Use card opposite pg. 4).

On this page, a number of games and articles are listed for evaluation, as well as some general interest questions. When evaluating a game, consider such matters as PRESENTATION (graphics, sound, packaging, and documentation); GAME DESIGN (design, playability, and level of interest); and LIFE (does the game wear well?). For each game which you have played or each article which you have read, place a 1 (terrible) through 9 (outstanding) next to the appropriate number.

Games
1. Ultima IV (Orign)
2. Might and Magic (New World)
3. Pirates (MicPr)
4. Starflight (EA)
5. Bard's Tale (EA)
6. Gunship (MicPr)
7. Bard's Tale II (EA)
8. Eternal Dagger (SSI)
9. Wizard's Crown (SSI)
10. Stealth Fighter (MicPr)
11. Gettysburg (SSI)
12. Anc. Art of War at Sea (Brdr)
13. Russia (SSG)
14. Chessmaster 2000 (STworks)
15. Rebel Charge (SSI)
16. Pres. Elect '88 (SSI)
17. Battles in Normandy (SSG)
18. Halls of Montezuma (SSG)
19. Warship (SSI)
20. Battlecruiser (SSI)
21. Alt. Reality:Dungeon (Datasoft)
22. Airborne Ranger (MicPr)
23. Apollo 18 (Accolade)
24. Seven Spirits of Ra (SirTc)
25. Falcon (Spectrum Holobyte)
26. Soko-Ban (Spectrum Holobyte)
27. Demon Stalkers (EA)
28. Earl Weaver Baseball (EA)
29. California Games (Epyx)
30. Skate or Die (EA)
31. Test Drive (Accolade)
32. NFL Challenge (XOR)
33. Wizardry IV (SirTc)
34. S.D.I. (Cinemaware)
35. Def. of Crown (Cinemaware)
36. Border Zone (Infcm)
37. Beyond Zork (Infcm)
38. Legacy of Ancients (EA)
39. Empire (Interstel)
40. Breach (Omnitrend)
41. B-24 (SSI)
42. Long Lance (SimCan)
43. Wings of Fury (Brdrbnd)
44. NBA (Avalon Hill)

Articles
45. UMS Sneak Preview
46. Mech Brigade Strategy
47. Shiloh Review
48. Airborne Ranger Review
49. Eagle's Nest Review
50. Border Zone Review
51. Legacy of Ancients Review
52. Darkhorn Review
53. Empire Review
54. High Seas Review
55. Good-bye "G" Ratings III

Questions:
56. Which of the following items is most important in influencing your software purchasing decisions? a) package art, b) advertisements, c) reviews, d) game designer, or e) publisher?
57. Which of the items listed above is the second most important factor in your software purchasing choices?

Game Ratings

"Gettysburg" continued to hold the high ground on the strategy side of our readers' Top 50, but "Ancient Art of War at Sea" is attemting to take the wind gauge by sailing into third place in its initial engagement. The initial strong showing by "Wargame Construction Set" appeared to be premature as it dropped from the top 10 completely off of the chart. The "Rebel Charge at Chickagamauga" dropped off from third place to eighth, but that still left SSI with five out of the top 10.

On the Action/Adventure side, readers sailing under the Jolly Roger reefed the mainsails of "Pirates" enough to allow the original "Wizardry" and "Might and Magic" to sneak ahead of it. "Might and Magic" enchanted its way to a hard-fought third place. Expect it to stay in the top 10 for a while due to a resurgence of popularity with its two new conversions. "The Eternal Dagger" sliced onto the top 10 ahead of its predecessor, "Wizard's Crown," in its first ratings test.

Strategy Top 50

Name	Mfg	Machine	Tms Rtd	Avg Rsp	Rating
Gettysburg	SSI	Many	7	46	7.82
Kampfgruppe	SSI	Many	11	93	7.66
Anc. Art War/Sea	Brodr	IBM	1	21	7.48
M.U.L.E.	EA	C,At	18	77	7.44
Russia	SSG	Ap,C	3	25	7.32
Chessmaster 2000	EA	Many	8	37	7.30
Mech Brigade	SSI	C,Ap	11	57	7.28
Rebel/Charge	SSI	Ap,C,I	2	25	7.27
Battle of Antietam	SSI	C,Ap,At	9	43	7.23
Defender of Crown	MstDes	Am,C,I	5	34	7.21
War in Russia	SSI	Ap,At	11	58	7.20
Seven Cities Gold	EA	Many	7	118	7.20
Battlecruiser	SSI	Ap,At,C	2	26	7.19
Battlefront	SSG	Ap	5	34	7.19
War in So. Pac.	SSI	Ap,C	3	20	7.18
Carriers at War	SSG	C,Ap	4	81	7.17
Europe Ablaze	SSG	C,Ap	6	33	7.17
Crusade in Europe	MicPr	C,Ap,At	6	68	7.14
Decision in Desert	MicPr	C,At	8	38	7.14
Ancient Art of War	Brodr	I,M	7	33	7.13
Reach for Stars	SSG	C,Ap	4	50	7.12
Battlegroup	SSI	C,Ap	3	37	7.11
Computer Baseball	SSI	Many	6	36	7.10
Heart of Africa	EA	C	3	27	7.09
Micro Lg Baseball	MicLg	Many	3	84	7.09
Star Fleet I	Intstel	Many	5	38	7.08
Balance of Power	Mdscp	Many	4	28	7.07
Colonial Conquest	SSI	Many	3	60	7.07
Opr Mkt Garden	SSI	Many	4	58	7.06
Silent Service	MicPr	Many	6	108	7.06
Under Fire	AH	Ap	6	23	7.06
3-in-1 Football	Hafner	C,Ap,I	2	20	7.05
Carrier Force	SSI	C,Ap,At	5	108	7.04
Flight Sim II	SubLg	Many	6	84	7.03
Conflict in Vietnam	MicPr	C,At	4	20	6.96
Warship	SSI	Ap,At,C	2	42	6.96
Breakthru Ardenne	SSI	C,Ap,At	3	44	6.95
Lords of Conquest	EA	Ap,At,C	3	42	6.93
Field of Fire	SSI	C,At	5	67	6.93
U.S.A.A.F.	SSI	C,Ap,At	2	26	6.92
NAM	SSI	C,Ap,At	3	24	6.88
Ace of Aces	Accld	Many	1	28	6.86
Roadwar 2000	SSI	Ap,C	3	34	6.80
Computer Ambush	SSI	Many	6	49	6.78
Gato	SpHb	Ap,I,M	3	79	6.77
Gulf Strike	AH	At	4	33	6.75
Universe	Omtrd	Ap,I,M	3	46	6.73
No. Atlantic '86	SSI	A,M	2	72	6.65
Knights of Desert	SSI	Many	5	63	6.61
Chickamauga	GDW	At,C	2	26	6.60

Adventure/Action Top 50

Name	Mfg	Machine	Tms Rtd	Avg Rsp	Rating
Ultima IV	Orign	C,Ap,At	9	92	7.88
Wizardry I	SirTc	Ap,I	20	72	7.69
Might and Magic	NewWrd	Ap,C,I	5	30	7.65
Pirates	MicPr	C	2	25	7.63
Starflight	EA	I	8	32	7.63
Bard's Tale	EA	C,Ap	9	77	7.56
Ultima III	Orign	Many	14	105	7.55
Gunship	MicPr	Am,C,I	5	42	7.54
Bard's Tale II	EA	Ap,C	5	48	7.50
Eternal Dagger	SSI	Many	1	21	7.29
Wizard's Crown	SSI	Many	8	55	7.20
Legacy of Llygamyn	SirTc	Ap,I	7	58	7.18
Knight of Diamonds	SirTc	Ap	11	53	7.17
Borrowed Time	Actvsn		1	27	7.15
Phantasie	SSI	C,Ap	9	70	7.15
Archon I	EA	Many	10	98	7.14
One on One	EA	Many	7	74	7.13
Elite	Fireb	C,Ap	5	45	7.10
Spellbreaker	Infcm	Many	5	24	7.10
Zork Series	Infcm	Many	7	122	7.09
Pinball Const. Set	EA	Many	4	47	7.08
Lode Runner	Brbund	Many	6	60	7.07
Phantasie II	SSI	Many	6	36	7.07
Questron	SSI	C,Ap,At	6	90	7.07
Sorcerer	Infcm	Many	5	58	7.07
WC Leader Board	Accss	C	3	23	7.04
Enchanter	Infcm	Many	4	45	7.02
Ultima II	Orign	Ap	8	61	7.00
Leather Goddesses	Inf	Many	2	31	6.98
Winter Games	Epyx	Many	1	37	6.97
Ultima I	Orign	Ap	2	48	6.96
Auto Duel	Orign	Ap	2	31	6.95
Moebius	Orign	Many	1	21	6.95
Deadline	Infcm	Ap,At,I	3	44	6.94
Rogue	Epyx	Many	1	26	6.92
King's Quest II	Sierra	Ap, I	4	35	6.88
Hitchhiker's Guide	Infcm	Many	4	108	6.86
Planetfall	Infcm	Many	3	51	6.86
Trinity	Infcm	Many	1	22	6.82
Wishbringer	Infcm	Many	3	36	6.79
Summer Games	Epyx	Many	2	35	6.79
Racing Dest Set	EA	C	3	49	6.78
Marble Madness	EA	Many	2	20	6.71
Phantasie III	SSI	Many	1	20	6.70
Hardball	Accld	C,Ap	7	43	6.69
Adventure Con. Set	EA	Many	4	49	6.64
Archon II	EA	C,Ap,At	4	76	6.64
Karateka	Brodr	C,Ap,At	3	79	6.64
Suspended	Infcm	At,Ap,I	6	61	6.63
World Karate Chship	Epyx	Many	1	23	6.57



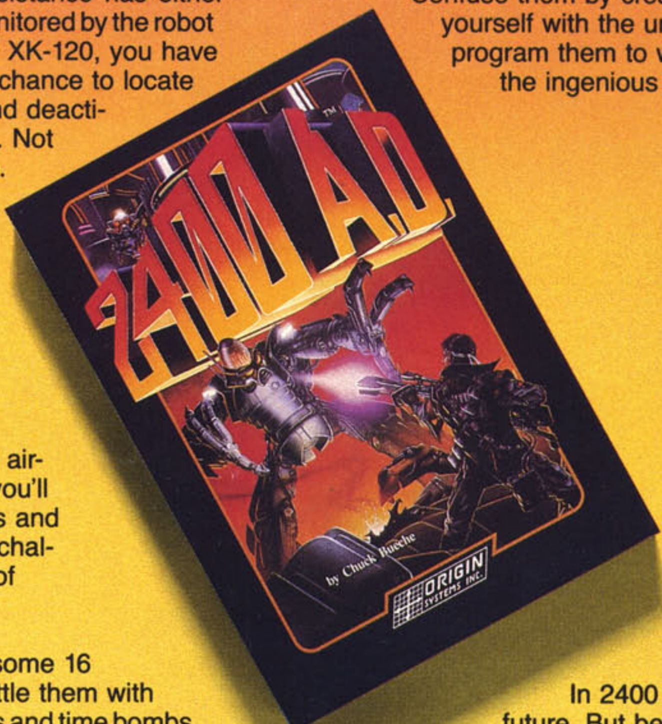
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